USE OF THESES

This copy is supplied for purposes of private study and research only. Passages from the thesis may not be copied or closely paraphrased without the written consent of the author.
FORGERY OF ARCHAIC CHINESE BRONZE INSCRIPTIONS.

A preliminary investigation of the extent of forgery amongst inscribed bronze ritual vessels of the Western Chou period.

by

N. Barnard.

October 1956.
Thesis submitted for the degree of Doctor of Philosophy in the Australian National University
The errors noted here are marked in pencil in the work with an encircled E (E) to indicate that the mistake is listed in the Errata.

p. 39: Fu ch'ai Catalogue - read as - Fu ch'ai chi chin la.

p. 60, note 33: the Ts'in Hou P'lan inscription is also published in the J.R.A.S., 1912, and in S. W. Russell's Chinese Art, vol. I. The reference to Shang Ch'ieng-teo's reproduction as the only one published is not correct.

p. 92: the third archaic character should be a further variant form was mistakenly copied here which does not accord with the observations made in the text.

p. 135, (line 8): Po ku - read as - K'ao ku.

p. 229, Fig. 19: the Rhyming character in no. 298 is (not the following character (s - y -).)

p. 282: Hs'un Hsien - read as - Ch'un Hsien.

p. 279, note 31: Jimbunka - read as - Jimbunkagaku.


p. 346, line 20: sentence omitted after '... interpreted as a vessel-name.' Insert, 'The same character is employed in the present inscription on the basis of this incorrect transcription.' (The next sentence should commence as a new paragraph.)

p. 347, line 19: after 'inscriptions', a period, then insert, 'Those'.

p. 348: Tso-ch'e Niew-Ling - read as - Tso-Ch'e-Niew-Ling.

Chu Fang-P'u - read as - Chu Fang-p'u.

p. 352, line 7: the third character in each of the ancestor's names should read - Hsu kiao ku Catalogue (Abbreviation).

p. 364: Hs'un Hsien - read as - Ch'un Hsien.

p. 370, line 6: '... (p. 7).' - read as - 'In Ch'eng Wang's reign (p. 7); however, ...'.

Bibliography:

no. 11: Li pan - read as - Li p'ien.

no. 14: characters for Kuo Mo-jo omitted, see no. 61.

no. 25: characters for Tung Tso-pin omitted, see no. 97.

nos. 26-7: characters for Wang Kuo-wei omitted, see no. 134.

no. 37: Hsi k'ao ku Catalogue - read as Hsi k'ao Catalogue, (Abbreviation).

no. 59: Liang lei hsien - read as - Liang lei hsuan.
2.

no. 93: Hsiao hsiao - read as - Hsiao chiao; the term is probably an official title (apparently also written as 小校 ). The first character, Hsiao, is mistakenly romanised as Shao in the Reference Table of Inscriptions.

no. 76: FengJu-chiai - read as - Feng Ju-chih.

no. 106, 103: Hsun - read as - Chun.

no. 133: Fu shih vung ch'i wei wen - read as - Fu shih ch'ien cheng wen.

no. 169: Wu Hou-hsuan - read as - Hu Hou-hsuan.

no. 272: Hun hsien - read as - Hui hsien.

General:

Ts'in is employed for Ch'in ( 秦 ) throughout the work - occasionally Karlgren's system slips in in this way, but most cases have been standardised to accord with the Wade system.
Inscribed Fang Tsun containing ins. 5.20 (see Fig. 28); private collection, Canberra. Height 58 cms., max. width of mouth 38 cms., max. width of base 31 cms. Probably an 18th century fake.

(Frontispiece)
Statement of Original Work.

It may be noted in the Preface that acknowledgement of assistance received has not been given; this omission has been made purposely as part of the general indication that the survey in its present form is purely a preliminary one and is not written with the intention of its being published. However, I may record here the valuable help received in assembling the collection of inscription reproductions upon which the survey is based and many useful discussions on various aspects of my research from Prof. Kaizuka Shigeki, Katō Joken, Sakino Takeshi, Umehara Sueji, Messrs Fujida Kunio, Itō Michiharu, Sugimura Yuzō, Yoshida Mitsukuni, and others in Japan; Prof. Tung Tao-pin, Messrs Chou Fu-kao, Shih Chang-yü, Jao Tsung-yi and others in Taiwan and Hongkong. Full acknowledgement will, of course, appear in its proper place in the major work projected when it is completed.

The general thesis that forgery amongst the bronze inscriptions of Western Chou is extensive and the systematic methods applied in an effort to clear this important group of historical documents from spurious materials comprises 'original work' in the sense that such a survey has not previously been attempted on so large a scale in respect to this group of documents. Most of the research in Sections Two to Six may be regarded as original from the point of view of the necessarily new approach to the material investigated. Section One is based to a large extent on Jung Kong's Shang shou yi chü t'ung k'ao but the interpretations made are my own. I am, of course, greatly indebted to the numerous catalogues, commentaries, and general works of numerous Chinese and Japanese scholars without which the survey could not have been undertaken. To Kuo Mo-jo's various books I owe the greater part of my knowledge of the archaic script which was gradually assimilated during the early stages of the research and before I had any reason to suspect the extensive prevalence of forgery amongst the inscriptions; needless to say Prof. Bernhard Karlgren's Grammata Serica has also been found an indispensable compendium although I do not subscribe to the 'loan' character (chia chish) theory.

During the period of active research more than 50% of the inscriptions incorporated in the survey have been transcribed by myself into modern character forms; all earlier transcribed inscriptions have been revised. All translations are my own based, of course, on studies of various commentators but the final renderings seldom accord entirely with that of any one commentator and numerous new interpretations are suggested particularly in respect to the recently excavated inscriptions dealt with in Section Six.

As to the plan of the work and the general presentation there is practically no relevant Western language publication available here which could be consulted for ideas; the plan and presentation has developed during the course of research and writing. It has some disadvantages which will be modified in the major work.
鼎

鼎鼎鼎鼎鼎鼎鼎鼎鼎鼎

鼎鼎鼎鼎鼎鼎鼎鼎鼎鼎
The first forgery?

"Ts'i attacked Lu and demanded the Ch'an Tripod; the people of Lu sent them a faked copy. The people of Ts'i said it was spurious; the people of Lu (said...) maintained that it was genuine ..."  

(Han Fei Tzu, Shuo lin, B/21, p. 17, Kambun Daikai, vol. 8)

* Commentaries discuss the possibility that 'Ch'an' should be written with the 'metal' radical - was the vessel also inscribed?
CONTENTS

1. List of Plates
2. List of Figures
3. List of Tables
4. Preface
5. Introduction
   General Remarks
   The Inscriptions
   Abbreviations
   Reference Table of Inscriptions
6. Section One
   An examination of the nature and reliability of previous investigations of the extent of forgery in the corpus of inscribed bronze vessels
7. Section Two
   The principle of constancy of character structures
8. Section Three
   An analytical examination of inscriptions manifesting inconstancy of character structures
9. Section Four
   The reversed sun-tzu phrase
10. Section Five
    An analytical examination of accepted forged inscriptions
11. Section Six
    Fully attested bronze inscriptions
12. Concluding Section . . . . . 418

13. Appendices

   Appendix A, The Month quarter : : : 426
   Appendix B, Further research : : : 430

14. Bibliography . . . . . 433

Pages containing Tables appearing at the end of Sections are not numbered.
PLATES

Frontispiece

Inscribed Fang Tsun containing ins. 520.

Plate 1.

Pottery seal inscriptions from Shantung xxiii

Plate 2.

Fragment of Sung period engraved stone printing of a page of the Li t'ai Catalogue 80

Plate 3.

Rubbing of ins. 127.1 94

Plate 4.

Rubbing of ins. 52.3 95

Plate 5.

The Mao Kung Ting vessel (ins. T.500.1) 125

Plate 6.

The Mao Kung Ting vessel and inscription area 126

Plate 7.

A recently made rubbing of the Mao Kung Ting 136

Plate 8.

Rubbing of the Hsi Chia P'an (ins. 129.1) 179

Plate 9.

Photo of text area and a hand-copy of the Ch' en Yi Fu (ins. T.74.3) 186

Plate 10.

Rubbing of ins. 71.2 192

Plate 11.

Rubbing of ins. 260.1 (v.b) 354

Plate 12.

Faked Shang inscription 356

Plate 13.

Photo of text area of ins. 127.1 368

Plate 14.

Rubbing of ins. 92.3 411
| FIGURES |
|-----------------|-----------------|
| **Fig. 1.**     | Hand-copies of spurious inscriptions . . . . . xvi |
| **Fig. 2.**     | Examples of modern character transcription of archaic forms . . . . . xvii |
| **Fig. 3.**     | Oracle bone texts with considerable repetition of identical characters illustrating principle of constancy . . . 93 |
| **Fig. 4.**     | Ins. 39.1; use of 'type' in forming inscription . . . . . 96 |
| **Fig. 5.**     | The Bamboo Tablets from Changsha . . . . . 98 |
| **Fig. 6.**     | Shantung pottery seal texts . . . . . 98 |
| **Fig. 7.**     | A spurious engraved copy of a Shou Hsien text on an authentic vessel . . . . . 104 |
| **Fig. 8.**     | Texts engraved in bronzes excavated at Shou Hsien . . . . . 105 |
| **Fig. 9.**     | Ornamental script of Ch'iu . . . . . 106 |
| **Fig. 10.**    | A selection of 'radicalised' characters amongst the Bamboo Tablets . . . . . 107 |
| **Fig. 11.**    | Character arrangement in the Mao Kung Ting . . . . . 138 |
| **Fig. 12.**    | Tracings of characters in the Mao Kung Ting illustrating size variation . . . . . 140 |
| **Fig. 13.**    | A comparison based on the character order of the Shih P'ei . . . . . 161 |
| **Fig. 14.**    | Transcription in modern character forms of ins. 71.2 . . . . . 193 |
| **Fig. 15 (a-c)** | Ins. 71.2 and the proto-types from which it was compiled . . . . . 207 |
| **Fig. 16.**    | Examples of inconstancy of structures in identical characters in vessel-lid inscriptions . . . . . 218 |
| **Fig. 17.**    | Examples of erratically written characters . . . . . 219 |
| **Fig. 18.**    | Meaningless groups of characters . . . . . 220 |
| Fig. 19. | Reversed sun-tzu phrases in the Shih ching | 229 |
| Fig. 20. | Reversed sub-tzu phrases in Han period mirror texts | 230 |
| Fig. 21. | Ins. S.41.1 reversed to illustrate nature of script | 242 |
| Fig. 22. | Ins. S.65.2 Sung period copies | 248 |
| Fig. 23. | Ins. S.70.2 structural variations in the series | 254 |
| Fig. 24. | Hand-copies of ins. T.14.1 | 268 |
| Fig. 25. | Identical characters in the Mai inscriptions inconstancy | 272 |
| Fig. 26. (a-d) | Li-Ting inscriptions | 339 |
| Fig. 27. | Character variations in Ch'en Chieh-ch'i's pottery inscriptions | 358 |
| Fig. 28. | Examples of some of the poorest efforts of forgers | 359 |
| Fig. 29. | Some attested Western Chou inscriptions | 364 |
| Fig. 30. | Ins. 127.1 | 367 |
| Fig. 31. | Benefices recorded in ins. 127.1 | 376 |
| Fig. 32. | Ins. 54.1 and some short attested inscriptions | 381 |
| Fig. 33. | The so-called 'Piao bells' text | 388 |
| Fig. 34. | Two long inscriptions on bronzes from Shou Hsien | 399 |
| Fig. 35. | Ins. 29.10 | 400 |
| Fig. 36. | Ornamental script and sword-text from Shou Hsien | 401 |
| Fig. 37. | Ins. 46.2; engraved on two vessels excavated at Loyang | 405 |
| Fig. 38. | Modern character transcription of ins.82.1 | 407 |
| Fig. 39. | Rhymes in the Ts'ai bronze inscriptions | 409 |
Fig. 40. Modern character transcription of ins. 92.3

Fig. 41. Modern character transcription of ins. 54.3

Fig. 42. Month quarters in the Shu ching

Fig. 43. Date formulations of authentic inscriptions
1. Reference Table of Inscriptions & 0 & xvi
2. Table No. 1. Examples of repeated characters in individual inscriptions written inconstantly & 0 & 113
3. Table No. 2. Analysis of inscriptions exhibiting inconstancy of character structures & 0 & 224
4. Table No. 3. Analysis of inscriptions with reversed sun-tzu phrase & 0 & 325
5. Table No. 4. Li-Ting-vessels, inscriptions and decor & 0 & 336
6. Table No. 5. Inscription types and decor combinations & 0 & 338
7. Table No. 6. (a) Analysis of accepted forgeries (b) Analysis of spurious copies & 0 & 360
8. Table No. 7. Major table of analyses completed to date & 0 & 425
9. Table No. 8. Second, third, and fourth month quarters & 0 & 429

Pages containing the Tables are not numbered — they follow the pages of the body of the text as indicated above.
Illustrations and Archaic Characters

Within the body of the text shapes of archaic characters written in by hand may often vary in respect to the originals; structures, however, are carefully and accurately maintained. Hand drawn illustrations of archaic script in the Figures are in most cases copies made by eye and only in a few instances have actual tracings been made. Proportions are not in accordance with the original rubbings but the general appearance, shapes, structure and balance of characters reflect reasonably faithfully the same features of the inscriptions. In all cases character structures have been drawn to the best of the writer's ability, correctly in all detail.

The poor quality of some of the reproductions is due in some measure to the eccentricities of the photo-copying machine as well as to the inexperience of the writer in operating it.
**Romanisation**

The Wade System is generally followed but without the circumflex 'â' or the marked 'û'; the letters 'e' and 'u' only are employed. All sounds 'i' are written 'yi'. These three modifications have been made only for typographical reasons.

Proper names in the bronze texts often present difficulties as the characters cannot be equated with modern forms; in many such cases the sound of a prominent and recognisable element of the character is arbitrarily chosen and employed as the sound of the whole character - this is done merely to avoid frequent use of 'I's and 'Z's.
Preface.

This survey is written primarily as a record of my investigations on the authenticity of the bronze inscriptions of Western Chou for examination as a doctoral thesis; the research involved covers a period of less than two years' full-time study of the problems and is still in progress. Final assessment of the nature and the extent of forgery will not be possible for some time, thus the present paper must be regarded only as a preliminary survey of particular aspects of the study. A selection has been made of those items which I consider to be of special significance in indicating the urgency for a complete and thorough investigation of the bronze inscriptions of ancient China; several statements and conclusions presented in the following treatise are therefore necessarily of a tentative kind and may require certain modification or, perhaps, complete re-assessment during the next few years as more archaeological documents are unearthed. Certain results of the survey are, however, not only conclusive but also are of considerable importance in the determination of forgery.

The thesis may be summed up in a few words:

Amongst the general body of bronze inscriptions numerous inscribed vessels, hitherto accepted as genuine, are actually forgeries
of comparatively recent manufacture; the basic criterion of forgery established is one heretofore unknown to forgers and to scholars alike and is here revealed for the first time and its application carefully expounded.

Other features which I believe to be indicative of spurious inscriptions are analysed throughout nearly 1,000 bronze texts and their possible value as criteria of fraudulence is considered.

To those familiar with the bronze inscriptions the highly unorthodox aim of the survey will be immediately apparent, for a long list of eminent scholars such as Ou-yang Hsiu, Juan Yuan, Sun Yi-jang, Wang Kuo-wei, Yang Shu-ta, etc., have accepted as genuine many of the inscribed bronzes which are determined as fakes in this paper. Western sinologists, amongst whom W. P. Yetts, H. G. Creel, and B. Karlgren are the most important, similarly accepted the inscriptions as authentic. However, mere acceptance is no proof of authenticity. It will be observed that the methods of research applied in this paper are, when compared with those of earlier scholars, also 'unorthodox' in some respects: firstly, all available and relevant archaeological documents form the basis of the investigation - a feature to be found in no previous work; secondly, each inscription is regarded as a separate document even though the text is identical throughout a series of inscriptions or vessel-lid sets - an important
departure from the rather loose approach in earlier published studies; thirdly, transcriptions of archaic characters into modern forms are effected in a systematic manner so that the reader may readily reconstruct the original forms in his mind in the majority of cases - meticulous observation of this kind has paid good dividends; fourthly, translations of the inscriptions render faithfully what is expressed in the original inscription - if sense does not prevail no attempt is made to force, by what I believe to be unjustifiable methods, an interpretation which is not supported by the text itself. Furthermore, translations are based primarily on word-usage as exhibited throughout the bronze texts; the chia chieh or 'loan character' theory is largely dispensed with for reasons advanced later on; fifthly, all inscriptions that are fully attested, and a few cases of inscriptions that are 'acceptably' attested, are assembled into one group to form the basis of the study and to act as a form of control. They are regarded as 'primary evidence'; unattested and vaguely (therefore unacceptably) attested inscriptions are classed as 'secondary materials'.

These five disciplines have not previously been employed effectively in this field, in fact, only the third item may be noted in the works of one or two Chinese scholars. Although, for nearly three decades, it has been theoretically possible
for the principle of constancy of character structures to have been discovered - an aspect of Chinese writing which has existed unnoticed over a period of three thousand years exerting its influence on the script from Shang times to the present - it has remained hidden simply because fully authenticated inscribed articles recently excavated have never before been examined apart from the vast mass of purported (but untestified) documents of Shang, Chou and the Chan Kuo periods. My discovery of the principle was purely accidental but its effect on my attitude and approach to the bronze texts was considerable; no longer could I find justification to rely solely on the accumulated knowledge and opinion of scholars of the last nine centuries whose efforts, and indeed those of their recent and modern counterparts, were often highly tempered by medieval concepts. It was necessary to review again each inscription upon its own merits and to study each in relation to all. This is the outstanding feature of the survey - every inscription whether discussed in detail or merely incorporated in one or other of the various Tables has been examined directly from reproductions (in a number of cases from the originals) and the notes and analyses made are the direct results of this practice. Earlier transcriptions of the archaic texts have, naturally enough, been carefully considered but they have been employed only as a general aid and are not regarded as conclusive
renderings in every case. Chinese and Western commentaries are, of course, referred to but the survey is not a study of commentaries; the inscriptions are the basic materials and have been consulted individually and collectively as the occasion demands.

Particular care in matters of observation has resulted in the discovery of many spurious copies of earlier existing inscriptions in catalogues of Sung, Ch'ing and recent times which have not hitherto been suspected. So complicated is the set-up that it is now no longer possible to refer to individual inscriptions in the lax manner found in most publications; a system of serial numbers has been allotted to each inscription so that definite and unambiguous reference is now possible. In a manuscript of this nature it is not practicable to present illustrations of all the documents consulted - as far as the bronze texts are concerned a large proportion are reproduced in two well known catalogues that should appear on the shelves of any well-equipped Chinese library; a list of the inscriptions by serial numbers together with location references follows the Introduction. Throughout the survey and the Tables, the inscription serial number is employed, only in a few cases are the inscriptions referred to by name.

New material is constantly arriving and important evidence supporting or modifying aspects of the survey becomes
In some cases it has been found possible to re-cast the text on finally-typed pages and to incorporate further observations based on later available material. A considerable amount of re-typing of this kind has been done; it has not been restricted to new archaeological publications, for instance, H. A. Giles's *Adversaria Sinica* arrived a month or so after Section One was finally typed and caused the re-typing of 10 pages of this Section as Giles had also made a translation of Chao Hsi-ku's account of archaic bronzes. His misinterpretation of the terms K'uan and Chih and a few minor points relevant to the general discussion had to be referred to. Dr. Flenderleith's important article on patina was discovered in a private library in Melbourne only a few weeks ago. Archaeological bulletins, however, have caused the greatest difficulties in regard to the important evidence they contain, and the necessity of its incorporation by some means in relevant places in the thesis.
available at inconvenient moments - to avoid continual re-writing I have added further annotations in appropriate places on several verso pages with a red asterisk in the relevant section of the text.

N. Barnard,
University House,
Canberra, A.C.T.
31.10.56
INTRODUCTION.

General Remarks.

It is not proposed to discuss at length elementary matters in regard to the bronze inscriptions; the subject under survey is a somewhat specialised one and the survey itself is prepared in manuscript form at an awkward stage of the period of research. Many avenues have yet to be explored and the whole field is in a state of flux owing to newly discovered material becoming available every few weeks. Vast quantities of scientifically excavated objects have yet to be reproduced in publication and it may require many months or even years, before archaeological bulletins will succeed in presenting for study more than a fraction of the treasures that have been unearthed in China during the past five or six years. This survey is planned to cover ultimately the whole field of bronze inscriptions and from the point of view of historical study will appear in some respects as a new Shu ching with both chin wen and ku wen chapters; the final work will be modelled to a large extent on Jung Keng's excellent Shang chou yi ch'i t'ung k'ao as far as introductory material is concerned. For the present the reader may consult this work for general information; Chu Chien-hsin's Chin wen hsueh and Fujihara
Sosui's *Shodō Kinsekigaku* are also particularly useful compendiums. Methods of interpretation are best illustrated in Yang Shu-ta's *Ch'i wei chu chin wen shuo* which must, however, be read with considerable care and with constant reference to reproductions of the inscriptions he deals with. Kuo Mo-jo's several works: *Liang chou chin wen tz'u ta hsi*, *Liang chou chin wen tz'u ta hsi t'u lu*, *Liang chou chin wen tz'u ta hsi k'ao shih*, *Chin wen ts'ung k'ao*, etc., all contain valuable transcriptions, and commentary, and are usually well illustrated, but Kuo is often careless although his ideas are original and nearly always clearly expressed. There is unfortunately no Western work which covers the ground adequately; the various catalogues published offer some general information in introductory sections and present translations of the inscriptions - one of the best examples of the latter is the catalogue of the Freer Gallery of Art (Smithsonian Institution, Oriental Studies, No. 3) which gives considerable commentary with the translation.

---

1. A useful resume of the basic literature of Chin Shih Hsueh appears in a recent issue of the *K'ao ku t'ung hsun* by Ch'ien Kung-jou (1956. Vol. 4, pp. 89-94).

2. Prof. W. Perceval Yetts has, in a number of catalogue introductions and articles, presented particularly useful studies of individual inscriptions, and throughout his writings some very valuable general information on bronzes is available. Prof. B. Karlgren has written extensively on the subject and although he has usually avoided complete translation of the inscriptions in his various articles (being mainly concerned with stylistic and chronological investigations) his *Grammata Serica* is, to the student of the inscriptions, a most
Forgery has long been recognised as a problem of some magnitude that must sooner or later occupy the attention of students of Chinese culture; forgers have plied their trade in all periods and in all fields. Not content with faking 'ancient' classics, in whole or in part, they have manufactured even 'primary' texts of the kind from which it is presumed such compilations as the Shu ching were made - many of the bronze inscriptions might well have been incorporated as chapters in this book. Although Chinese scholars have been long aware of the practice, they have not attempted any really effective study of the nature or the extent of forgery in the corpus of inscribed bronzes. Western writers, too, have shown a similar complacent attitude and like their Chinese colleagues engage in detailed investigations of the bronze vessels with barely a moment's thought of the possibility that the objects might be discovered to be faked upon careful examination. This attitude is a most disconcerting one,

2. valuable compendium. Other than a few further items by other Western writers there exists little of essential value which may assist the student in this field. He has no Legge, Chavannes, Rotour, Giles, etc., to guide him in matters of general research or in methods of presentation. As respects the subject of forgery, he is in most stages of his research both a pioneer and an iconoclast; the former is particularly the case in his constant reference to Chinese and Japanese language material and his unending examination of the original archaic sources, while the results of his investigation will not be happily accepted by those of contrary opinion.
especially in view of the almost general lack of testimony accompanying the bronze vessels; although it is our intention to deal solely with the inscriptions it seems desirable, however, that some attention be given to the records of scholars' and collectors' opinions and studies from Sung times to the present in regard to the problems of forgery. The first Section of the survey is devoted to this end, and incorporates the contents of nearly all of the small number of investigations that have been conducted - the value of the earlier studies is extremely limited, and it seems surprising that even the inscriptions recorded in the first catalogues have, in the circumstances, been so uncritically accepted.

Section Two embodies the results of an examination of fully attested archaeological documents of Shang, Western Chou, Eastern Chou and Chan Kuo period origin. Upon the basis of more than 25,000 individual inscriptions the principle of constancy of character structures is established. Inconstancy is shown to be a definite criterion of forgery. At the conclusion of the Section, cases of inconstancy in the bronze inscriptions are tabulated and illustrated.

Section Three comprises an analytical study of the inscriptions determined as forgeries in the preceding Section. Other possible criteria are thus sought and the results are tabulated.
Section Four is concerned with the reversed sun-tzu phrase found in prose text of the inscriptions. We believe its occurrence thus to be certain proof of forgery. The inscriptions declared spurious because of this feature are analysed as in the preceding Section in a search for other characteristics that seem to indicate forgery and the results are tabulated.

Section Five is a similar analytical study directed towards inscriptions declared to be fakes by various eminent scholars employing criteria unrelated to those so far established by us. The results are tabulated. The three Tables show a significant consistency of suspect features in each group.

Section Six comprises a study of fully attested bronze inscriptions; no tabulation is necessary as the majority of criteria and suspect features analysed in the preceding three Sections is absent in this group of genuine inscriptions.

In the Concluding Section the significance of the survey as it has progressed to date is discussed. Reference is made, too, to the Major Table of some 900 inscriptions which have been carefully analysed during various stages of the study. This briefly, then, is the general plan of the work; The term 'chapter' is avoided as it does not pretend to be presented in a final form, but is rather a series of separate
studies linked somewhat loosely together. Several of the Sections will be modified to form articles for publication in the near future. The Major Table, placed at the end of the survey is, we believe, a useful compilation; as new inscriptions are excavated under properly controlled conditions their characteristics may be immediately compared with those in unattested materials and gradually the significance of the various suspect features as possible criteria of forgery will become apparent.

Serial numbers denote particular inscriptions and are employed throughout the paper and in all Tables. The system is a simple one - the letter 'S' denotes Sung Catalogue inscriptions, 'T' denotes early Ch'ing Catalogue inscriptions (i.e., those 'discovered' or published up to 1850), while an inscription lacking a letter is one 'discovered' or published sometime after 1850. Each number comprises (a) the number of characters in the inscription and (b) a number differentiating the inscription from others with the same number of characters. Ins. T.112.1 represents the Tsung Chou Chung inscription text - a bell containing 112 characters first published in the early Ch'ing Catalogues. The number 1 is

3. Other letters are employed in denoting other inscription types: 'B' indicates the bamboo tablets recently unearthed in Changsha; 'P' denotes inscriptions on pottery; 'H' refers to inscription texts recorded in the Dynastic Histories, the original vessels lost long before Sung times; 'L' denotes inscriptions in lacquer-ware.
added to distinguish it from other inscriptions of the same number of characters (at present, however, it is the only example). Ins. S.70.2 (v.c.) denotes an inscription of 70 characters first published in the Sung Catalogues (it is the second of several inscription texts with this number of characters); the original vessel now no longer exists. The letters (v.c.) are added to signify that it is the vessel-text of a vessel-lid set; the letter (c) shows that it is one of at least three vessels containing the same text; ins. S.70.2 (l.c.) is the lid-text belonging to this vessel. When the inscription number is followed by (v) or (l) then it signifies that it is the vessel or the lid of a vessel-lid set; only if letters a, b, c, etc. are added also does it denote a series of vessel-lid sets. The absence of a bracketed letter indicates that the vessel containing the inscription is not part of a vessel-lid set or of a series but is a solitary article. Vessels without lids but in a series are followed by bracketed letters: (v.aa), (v.aa), etc., the underline denotes the fact that there is no lid in each case.

4. There is considerable confusion as to the nature of reproduced inscriptions; authorities often do not agree as to whether a given inscription appears on a lid or on a vessel. We have attempted to clear up some of the inconsistencies, but much yet remains to be achieved; without access to catalogues with photos of the vessels as well as reproductions of the inscriptions, little progress can be made - in fact, even if a complete set of such catalogues were available for consultation, there would still remain many scores of doubtful cases impossible to resolve unless the original vessels were examined.

The bracketed letters are employed mainly in Tables or where particular reference to individual inscriptions is required; otherwise the serial number alone is used.
The list of serial numbers which follows the Introduction incorporates all inscriptions referred to or tabulated in the survey; as far as possible those reproduced in Lo Chen-yü's San tai chi chin\textsuperscript{ts'\text{un}} are given page references to this catalogue. If the inscription does not appear in Lo's catalogue, Kuo Mo-jo's Liang chou chin wen tz'u ta hsi t'\text{iu} lu is used as the source. Between them the two catalogues contain a large proportion of the inscription rubbings. Sung Catalogue inscriptions are referred to in the earliest catalogue where the inscription appears; if later copies appear in later Sung Catalogues the reference is made accordingly. Reproductions in the Imperial Catalogues and in Juan Yuan's Chi ku chai chung ting yi ch'i k'uan chin are referred directly to these sources, and if rubbings of the same inscriptions appear in later catalogues these are noted also (in the majority of cases the source is Lo's catalogue above). It has been necessary, of course, to incorporate a number of other catalogues in the list which are the sole sources of the inscriptions concerned.

Approximately 60 inscriptions appear as translations in various parts of the survey; in every case they should be regarded as tentative renderings. This statement is made not entirely as a matter of caution but to draw attention to a principle which we consider to be of special importance in investigations of the nature of forgery in documents of this kind. Renderings in English are made in strict accordance
with the archaic text and no attempt is made to read more than we consider justified in the characters that appear. Translations resulting from this essentially strict discipline will no doubt receive criticism as being too literal, and although the bronze inscriptions present many features in common with the style of the Shu and the Shih, it may be opined that they lose this identity as a result of the translation method. However, there are certain problems which will not allow even the slightly liberal form of translation as employed by such authorities as Legge or Karlgren: firstly, the documents are not above suspicion and relatively free translation will tend to cover textual characteristics which fully attested inscriptions may later show to be features of forgery and not of Chou period writing; secondly, the translations are not intended as an end in themselves - as stated earlier, the inscriptions are the documents under survey, not the renderings in English or the modern character transcriptions in the various Chinese commentaries; thirdly, and most important, is the nature of the fully attested inscriptions as contrasted with that of many of those which lack testimony. In the former case an interpretative translation which will appeal to the general sinological taste is, within the limits of our knowledge of the archaic script, possible; in the latter case, however, the original text will often not support
Fig. 1. Handcopies of spurious inscriptions discussed in the following pages.
a sensible translation merely because the archaic Chinese text itself is corrupt and meaningless. *Ins. 27.11* reproduced opposite is one of numerous examples which might be chosen to illustrate this point; the generally acceptable form of translation would probably read as:

1. A .... insignia and a pair of horses were presented to Kuei-

2. Ta. (He) made obeisance, bowed low his head and responded extolling (this)

3. munificence; therefore made (for) my august deceased father, Li, (this)

4. Kuei-vessel. May sons and grandsons forever value and employ (it).

Our reading would be:

1. .... insignia, horses - two. award. Kuei-

2. Ta made obeisance, bowed low his head and responded extolling.

5. Names and titles and combinations of both in the inscriptions are arbitrarily dealt with in our translations in the survey. The characters concerned are rendered in romanisation with capital letters and the individual elements of the name or title-name are connected by hyphens. This is done purposely to indicate that considerable enquiry is yet required to finalise interpretation as well as presentation methods of the combinations found in the inscriptions. The problems that exist may best be resolved with reference to fully attested examples when sufficient quantities of such material become available.
3. grace. Therefore made (for) my august deceased father, Li, (this)


Discussion on synonymical variations for 休 or 孫 need not be entered upon; the important difference is that of the rendering of the first line and that of the last two characters of the 'extol' phraseology. The sense is confused here; in such cases the usual meaning of each character is given and followed by stops to indicate that the 'sentence' does not make sense. The normal phrasing of the 'extol' phraseology is:

某拜首敢對賜天子不顯魯休.

'X made obeisance, bowed low (his) head and dared to respond extolling the Son of Heaven's great and illustrious, admirable, grace.'

Similar context is found in several chapters of the Shu and also in the Shih; in the inscriptions it is very common. Ins. 27.11 lacks the characters 'Son of Heaven' (or 'King') between 'extol' and 'grace'. Because of the preceding context there is no justification to annotate the passage with the missing term bracketed; on the basis of several scores of examples of the phraseology, it is obvious that the insertion
of a vague '(this)' is also not acceptable and will merely cause what is essentially a corrupt text to read smoothly. Although it is tempting to present a palatable interpretation in cases of this kind, the temptation is one that must be resisted; the reader may discover the reason for this if he compares the present inscription (which is in a Kuei-vessel typical of Western Chou style, heavily - and apparently naturally - patinated, lodged in a private collection in Canberra) with ins. T.104.3 (v.b). One or two further examples might be noted at this stage. Ins. 12.17 reads:

1. 佳三月甲午令
2. 休王易乍鬻用

and would be translated as:

In the fourth month, on the day, chia-wu.
command.
grace. King. award. made. precious.
employ.

The first four characters are straight-forward, normal prose; the remainder, however, are nothing but a jumble of nonsense.

A group of characters such as: (ins. 11.5)

6. See Section Five, p.359
would necessarily be rendered as:

1. When the Duke inspected (?)
2. not able to forget. thus.
3. Yen-vessel (?) offer (?) (particle).
   Ting-vessel (particle).

Strangely enough, the 11 characters comprise a complete inscription and the composition and manufacture of the inscribed vessel was done by Chinese artisans!

When the same literary style appears in inscriptions hitherto accepted as genuine Chou period compilations, we adopt the same method of translation. In ins. 66.3, for instance, is the 'sentence': 拜頌首魯天子
which has been variously interpreted as:

'made obeisance to the Son of Heaven of Lu.'

'(The Marquis) bowed his head (to his hands and then) to the ground. In the Temple at Lu which is like that of the Son of Heaven.....'

'(The Marquis) bowed his head (to his hands and then) to the ground. The Heir Apparent of Lu.....'
The first is by L. C. Hopkins, the second by W. P. Yetts, and the third by T. Takata as rendered by Yetts (Eumorfopoulos, Vol. 1, p. 27-8); we would prefer the following:

'Made obeisance and bowed low (his) head. admirable. Son of Heaven.'

Takata has mistakenly read  as 太 (= 太), thus his interpretation may be dispensed with; Hopkins has suggested a rather original rendering which, however, has no support in the inscriptions generally, or in the traditional literature; that of Yetts, we venture to suggest, is rather forced and hardly supported by the original text. Should the word order be considered correct, we might concur with Kuo Mo-jo and regard the character  here as a verb?

'bowed low (his) head and (admired=) showed his appreciation (to) the Son of Heaven.'

It would, however, be the only example of such usage amongst several scores of similar sentence types; in cases of such exceptional variation of word order which we believe to be comparable with the three faked texts quoted above, the

7. This character does not appear in the traditional texts with the peculiar meaning it obtains in the bronze inscriptions; early in our studies of the inscriptions we followed the rendering of  as given by Professor Kung-chu (Chou ts' in chin shih wen hsuan p'ing chu, pp. 14, 38, et al.) and have always found the sense of 'admirable', 'praiseworthy', 'excellent', etc., suitable notwithstanding the absence of examples in the 'classics'. 
translation presented always indicates the variation. The purpose in doing this is a necessary one - very little is known of word usage in Chou times, particularly as it appears in primary documents. No extensive 'grammatical' survey has yet been attempted in respect to the corpus of bronze inscriptions. Where we consider the text to be at fault on the basis of our knowledge of the bronze texts and other archaeological documents, we do not feel justified in forcing sense from recalcitrant combinations of characters unless fully attested examples support the renderings that might so result. At this stage, we believe the translation discipline employed to be a valuable and justifiable one, for it can be modified with reference to newly discovered materials if these illustrate the need to do so. So far the genuine documents support our attitude and approach to the unattested inscriptions in regard

8. The whole problem of translation is such that definitive renderings cannot always be made, and when attempted, are not always generally accepted. Ins. 127.1 recently excavated and fully attested presents an interesting example; five different transcriptions and interpretations of crucial points in the text have been published in the last 12 months to which is added our own commentary (see Section Six) together with certain criticisms of the preceding five - the general interpretation of the text is, however, fairly consistent throughout the studies made to date. Ins. 129.12 is similarly situated, and a convenient study is made by Yetts (The Cull Chinese Bronzes, pp. 60-75) illustrating in particular the difficulties that often face the translator in Chin Shih Hsueh and the variety of interpretations possible.
to matters of interpretation and translation.\footnote{9}

It should be noted that the survey is concerned solely with the inscription as the means of determining forgery; already we have received criticism for not concentrating on stylistic studies of the vessels and their decor, but the critics do not seem to realise that the materials involved are not 'normal' archaeological objects. If one would attempt to discover stylistic criteria determinantive of spurious imitations of Shang and Chou inscribed bronze vessels, or of those without inscriptions, the first step would involve the assembly of all vessels available in illustration whose provenance is scientifically attested. Having collected such vessels together and carefully analysed the characteristics of vessel-types and decor, the student will discover that the reliable materials at present available are barely sufficient to proceed further along this avenue of research. The inscription, on the other hand, is not limited to bronze as a medium of record;

\footnote{9. Recourse may be made to traditional literature in matters pertaining to translation but this must be done with extreme care as an entirely different class of documents is involved. Fully attested archaeological writing shows clearly that a considerable modification of the archaic script as it had developed in Chan Kuo times was effected by Li Ssu; as to the reliability of Han period transcriptions from archaic into current writing, we know little. For this reason we treat the archaeological documents as a separate group, and attempt to assess significant features with minimum reference to the literary style of the 'classics'.}
Plate 1. Pottery seal inscriptions from Shantung sites. Reproduction of Fig. 33 (p. 266) in Sekino Takeshi's Chūkoku kokōgaku kenkyū; the originals were destroyed by bombing during the war.
inscriptions are executed by brush and ink on bone, pottery, bamboo, and silk; they are found engraved on bone, stone, pottery, and bronze (after casting of the vessels); and cast inscriptions in bronze are also available. Amongst fully attested documents all the preceding types of writing appear in large quantities from various parts of China and datable over a period of a thousand years. With material such as this, scientific investigation is possible; in the aesthetic realms of stylistic study such control is limited at present, but no doubt will be possible in the next few years. Occasionally, however, we have diggressed slightly in the survey to offer a few remarks on the value of stylistic study as it has been conducted up to now; but it is with some misgivings that we enter thus a field of research in which we can only bring to bear accurate observation and reasonable standards of judgement - the observations made are not those of an archaeologist but are those of an historian, whose primary aim is to assess the authenticity of the documents concerned before embarking upon interpretations of them for an historical purpose.

The Inscriptions.

Strictly speaking, the list of inscriptions consulted or incorporated in the survey which follows this introductory note is an extension of the Bibliography. Each inscription is a document which has been carefully studied not only from
epigraphic aspects but also from the point of view of its contents; it is convenient, therefore, to place the basic materials of the survey before the reader at this early stage so that he may have ready thecatalogues containing inscription reproductions to accompany his reading of the work, and to gain full appreciation of the significance of the various Tables of analyses.

It will be immediately obvious that the survey, when it reaches its final form, will require a considerably large volume of reproductions in order to effect reasonable illustration of much of the discussion, and to show more clearly the nature of the comparative analytic examinations of the inscriptions. In the present work, therefore, we have attempted to restrict inscription references to as small a number of catalogues as possible. In actual fact, many scores of catalogues have been consulted in our search for duplications of identical inscriptions in different vessels. The restricted reference given to each item, however, is not necessarily that of the best reproduction of the inscription, and the reader may need to consult J. C. Ferguson's Li tai chu lu chi chin mu for further reproduced rubbings in various cases. In respect to the Sung Catalogues, particular editions have been consulted ranging from Sung to Ch'ing times, and where variations in reference technique occur (e.g., various editions of the Li tai chung ting yi ch'i k'uan chin) we have adopted that recorded in
Ferguson's valuable compendium.

Abbreviations employed in the following list are made especially to allow the typing of two columns to each page, and are not used in this form elsewhere in the survey. We are unable to give precise references to several sources as the publications are not available in Australasia, and we have had to work only from photographs of the rubbings. Certain inscriptions are accompanied by the words, 'Photo' or 'Rubbing', indicating thus that the inscription has not yet been published and is available only in this form. Photographs of rubbings in catalogues unavailable to us are represented in the list by an abbreviated title of the catalogue, and a code number referring to the location of the photograph in our collection of some 8,000 items. In most of these cases an alternative reference is given, particularly where the inscription is either an original or a copy of a Sung or early Ch'ing Catalogue reproduction. Where we have found rubbings of the originals reproduced in the early Ch'ing Catalogues reference is made to these, for comparison of the two methods of reproduction illustrates well the general reliability of the hand-drawings of earlier times.

Altogether, approximately 1,000 individual inscriptions are listed; 728 are datable as Western Chou, 258 as Eastern Chou and Chan Kuo period. There are a few fully-attested Shang inscriptions incorporated, but the long inscriptions generally
adjudged to be of Shang origin are classed as Western Chou. Recent archaeological evidence has illustrated well enough that the Shangs did not put lengthy inscriptions on their bronze vessels; even such large objects as the 司母戊鼎 (height 137 cms.; length 110 cms.) were engraved with merely 2-3 characters probably denoting name of ownership or of dedication. It is doubtful, too, that the long 'Shang' texts are even of Chou period origin. The collection of Western Chou texts is the largest yet assembled for extensive study and is the group of documents with which we are particularly concerned. Analyses made of Eastern Chou and other materials to date are incorporated in the Major Table following the concluding Section partly as a form of control and partly to illustrate the possible extent of forgery in these documents. They are not a complete collection.

Abbreviations.

The letters C, E, W and S following the serial numbers denote respectively Chan Kuo, Eastern Chou, Western Chou and Shang period dating of the inscriptions. Uncertain or unascertainable cases are left blank. Inscription sources have the following abbreviations; after the full romanised titles, the bracketed numbers refer to the location of the publications in the Bibliography where further details and Chinese character titles are given:
Page references are made in accordance with the system obtaining in each work; where the page reference is absent the catalogue concerned is not available in Australasia - we have
worked from photographs.

*The Hsiao hsiao Catalogue is erroneously written as 'Shao' in the following list - see Errata.*
**REFERENCE TABLE OF INSCRIPTIONS**

<table>
<thead>
<tr>
<th>No.</th>
<th>Reference</th>
<th>Description</th>
<th>Page</th>
<th>Lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>600.1</td>
<td>C Photo</td>
<td>43.</td>
<td>148.1</td>
</tr>
<tr>
<td>2.</td>
<td>538.1</td>
<td>W Shang 282-9</td>
<td>44.</td>
<td>T.144.1 (v.a) W Chi ku 6/19a</td>
</tr>
<tr>
<td>4.</td>
<td>S.480.1</td>
<td>E Po ku 22/5-10</td>
<td>46.</td>
<td>141.1</td>
</tr>
<tr>
<td>5.</td>
<td>T.405.1</td>
<td>W S.T. 4/44-5</td>
<td>47.</td>
<td>138.1</td>
</tr>
<tr>
<td>6.</td>
<td>T.395.1</td>
<td>W S.T. 4/45-6</td>
<td>48.</td>
<td>133.1</td>
</tr>
<tr>
<td>7.</td>
<td>T.349.1</td>
<td>(v.b) W Rubbing</td>
<td>49.</td>
<td>131.1</td>
</tr>
<tr>
<td>8.</td>
<td>T.349.1</td>
<td>(v.b) W Kochühen</td>
<td>50.</td>
<td>131.2</td>
</tr>
<tr>
<td>9.</td>
<td>T.349.1</td>
<td>(v.c) W Shang 265</td>
<td>51.</td>
<td>129.1</td>
</tr>
<tr>
<td>10.</td>
<td>T.285.1</td>
<td>W S.T. 4/42-3</td>
<td>52.</td>
<td>127.1</td>
</tr>
<tr>
<td>11.</td>
<td>T.280.1</td>
<td>W S.T. 4/40-1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>260.1</td>
<td>(v.a) W T.C. Loo</td>
<td>53.</td>
<td>123.1</td>
</tr>
<tr>
<td>15.</td>
<td>S.204.1</td>
<td>W Li tai 1/14-5</td>
<td>56.</td>
<td>121.1</td>
</tr>
<tr>
<td>17.</td>
<td>T.195.1</td>
<td>W Hsi ch. 13/12b</td>
<td>58.</td>
<td>121.1</td>
</tr>
<tr>
<td>19.</td>
<td>187.1</td>
<td>(1.a) W S.T. 6/57b</td>
<td>60.</td>
<td>121.2</td>
</tr>
<tr>
<td>20.</td>
<td>187.1</td>
<td>(v.b) W S.T. 11/38b</td>
<td>61.</td>
<td>S.120.1</td>
</tr>
<tr>
<td>21.</td>
<td>T.162.1</td>
<td>W Hsi ch. 8/33b</td>
<td>62.</td>
<td>S.120.1 (v.b) E K'ao ku 1/7a</td>
</tr>
<tr>
<td>22.</td>
<td>S.156.1</td>
<td>W T.L. A/87b</td>
<td>63.</td>
<td>S.120.1 (v.c) E Hsi ch. 2/13b</td>
</tr>
<tr>
<td>23.</td>
<td>S.151.1</td>
<td>W K'ao ku 3/34b</td>
<td>64.</td>
<td>S.120.1 (v.d) E Chi ku 4/1b</td>
</tr>
<tr>
<td>24.</td>
<td>T.149.1</td>
<td>(1.a) W Chi ku 5/12-3</td>
<td>65.</td>
<td>T.115.1</td>
</tr>
<tr>
<td>27.</td>
<td>T.149.1</td>
<td>(v.c) W Hsi A 1/31b</td>
<td>68.</td>
<td>H.114.1</td>
</tr>
<tr>
<td>28.</td>
<td>T.149.1</td>
<td>(v.d) W Chi ku 4/32-4</td>
<td>69.</td>
<td>113.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.T. 4/37a-b</td>
<td>70.</td>
<td>T.112.1</td>
</tr>
<tr>
<td>29.</td>
<td>T.149.1</td>
<td>(v.e) W Hsi A 1/28b</td>
<td>71.</td>
<td>110.1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.T. 4/38a-b</td>
<td>72.</td>
<td>S.110.2 (v.a) W Po ku 16/27b</td>
</tr>
<tr>
<td>30.</td>
<td>T.149.1</td>
<td>(v.f) W S.T. 4/39a-b</td>
<td>73.</td>
<td>S.110.2 (v.b) W Hsi A 12/34b</td>
</tr>
<tr>
<td>31.</td>
<td>T.149.1</td>
<td>(v.g) W Chi ku 6/20-1</td>
<td>74.</td>
<td>S.110.2 (1.b) W Hsi A 12/35b</td>
</tr>
<tr>
<td></td>
<td></td>
<td>S.T. 9/45-6</td>
<td>75.</td>
<td>S.110.2 (v.c) W Naito (11/0)</td>
</tr>
<tr>
<td>32.</td>
<td>T.149.1</td>
<td>(1.g) W S.T. 9/46-7</td>
<td>76.</td>
<td>110.3</td>
</tr>
<tr>
<td>33.</td>
<td>T.149.1</td>
<td>(v.h) W S.T. 9/39-40</td>
<td>77.</td>
<td>107.1</td>
</tr>
<tr>
<td>34.</td>
<td>T.149.1</td>
<td>(1.h) W S.T. 9/38-9</td>
<td>78.</td>
<td>106.1 (v.a) W S.T. 9/37a</td>
</tr>
<tr>
<td>38.</td>
<td>T.149.1</td>
<td>(1.j) W S.T. 9/44-5</td>
<td>82.</td>
<td>S.104.1 (v.b) W Li tai 14/11-2</td>
</tr>
<tr>
<td>39.</td>
<td>T.149.1</td>
<td>(v.k) W S.T. 9/43-4</td>
<td>83.</td>
<td>S.104.1 (v.c) W Li tai 14/12-3</td>
</tr>
<tr>
<td>40.</td>
<td>T.149.1</td>
<td>(1.k) W S.T. 9/47-8</td>
<td>84.</td>
<td>104.2</td>
</tr>
<tr>
<td>41.</td>
<td>T.149.1</td>
<td>(1.l) W T.L. A/47a</td>
<td>85.</td>
<td>T.104.3</td>
</tr>
<tr>
<td>42.</td>
<td>149.2</td>
<td>W T.L. A/137a</td>
<td>86.</td>
<td>T.104.3 (v.b) W S.T. 9/26a</td>
</tr>
<tr>
<td>Page</td>
<td>Entry</td>
<td>Text</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>442.</td>
<td>30.4 (1) W</td>
<td>S.T. 8/35b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>443.</td>
<td>T.30.5 W</td>
<td>Hsi ch. 31/31b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>444.</td>
<td>S.30.6 E</td>
<td>K'ao ku 5/22b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>445.</td>
<td>S.14.12 (1) E</td>
<td>K'ao ku 5/22b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>446.</td>
<td>S.30.7 W</td>
<td>Hsiao p.26 (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>447.</td>
<td>S.30.7 (v.a) W</td>
<td>Fu ch'ai p.17 (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>448.</td>
<td>S.30.7 (v.a) W</td>
<td>Rubbing (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>449.</td>
<td>30.10 W</td>
<td>S.T. 4/12b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>450.</td>
<td>T.30.11 (v) W</td>
<td>Hsi A (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>451.</td>
<td>T.30.11 (1) W</td>
<td>Hsi A (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>452.</td>
<td>30.12 W</td>
<td>S.T. 4/13b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>453.</td>
<td>T.30.14 (v.a) W</td>
<td>Chi ku 5/2a (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>454.</td>
<td>T.30.14 (v.b) W</td>
<td>S.T. 11/35a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>455.</td>
<td>T.30.14 (1.b) W</td>
<td>S.T. 13/39b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>456.</td>
<td>30.15 W</td>
<td>S.T. 6/49b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>457.</td>
<td>30.16 W</td>
<td>S.T. 4/12a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>458.</td>
<td>29.1 W</td>
<td>Chi ku 5/31b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>459.</td>
<td>29.3 W</td>
<td>T.L. A/35b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>460.</td>
<td>29.4 W</td>
<td>T.L. B/165a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>461.</td>
<td>29.5 W</td>
<td>T.C.L. (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>462.</td>
<td>29.7 (v.a) W</td>
<td>S.T. 8/36b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>463.</td>
<td>29.7 (1.a) W</td>
<td>S.T. 8/36b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>464.</td>
<td>29.7 (v.b) W</td>
<td>S.T. 8/37a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>465.</td>
<td>29.8 W</td>
<td>Shang 274 (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>466.</td>
<td>T.29.9 (v) W</td>
<td>Chi ku 2/16a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>467.</td>
<td>T.2.17 (v) W</td>
<td>Chi ku 2/16b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>468.</td>
<td>29.10 W</td>
<td>S.E.O. 10/25a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>469.</td>
<td>29.11 W</td>
<td>E.S. 12/24a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>470.</td>
<td>29.12 W</td>
<td>E.S. 8/38a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>471.</td>
<td>28.1 W</td>
<td>Ch'in W 1/50 (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>472.</td>
<td>28.2 (v.a) W</td>
<td>T.L. B/156a (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>473.</td>
<td>28.2 (v.b) W</td>
<td>T.L. B/157a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>474.</td>
<td>28.3 W</td>
<td>S.T. 8/31b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>475.</td>
<td>28.4 (v) W</td>
<td>S.T. 8/31a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>476.</td>
<td>28.4 (1) W</td>
<td>S.T. 8/31a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>477.</td>
<td>28.5 W</td>
<td>Rubbing (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>478.</td>
<td>28.6 W</td>
<td>S.T. 4/10a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>479.</td>
<td>28.7 W</td>
<td>S.T. 3/47a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>480.</td>
<td>S.27.1 E</td>
<td>K'ao ku 7/12b (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>481.</td>
<td>27.2 W</td>
<td>T.L. A/68-9 (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>482.</td>
<td>27.3 (v.a) W</td>
<td>S.T. 11/34b (v.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>483.</td>
<td>27.3 (1.a) W</td>
<td>S.T. 11/34b (1.a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>484.</td>
<td>27.3 (v.b) W</td>
<td>S.T. 11/35a (v.b)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>485.</td>
<td>S.27.4 (v.a) W</td>
<td>Po ku 2/26b (v.a)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Additional notes:

- 486. S.27.4 (v.b) W Hsiao p.14 (v.b)
- 487. S.27.4 (v.a) W Fu ch'ai p.13 (v.a)
- 488. S.27.4 (v.a) W Fu ch'ai p.14 (v.a)
- 489. S.27.4 (v.a) W Chi ku 4/24a (v.a)
- 490. S.27.4 (v.a) W Hsi ch. 32/36b (v.a)
- 491. S.27.5 (v.a) W S.T. 8/28b (v.a)
- 492. S.27.5 (1.a) W S.T. 8/28b (1.a)
- 493. S.27.5 (v.b) W S.T. 8/29a (v.b)
- 494. S.27.5 (1.b) W S.T. 8/29a (1.b)
- 495. S.27.5 (v.c) W S.T. 8/29b (v.c)
- 496. S.27.5 (v.d) W Shao (27/0) (v.d)
- 497. S.27.6 (v.b) W S.T. 8/31b (v.b)
- 498. S.27.6 (v.a) W S.T. 8/31b (v.a)
- 499. S.27.6 (v.c) W S.T. 8/32b (v.c)
- 500. S.27.9 (v.c) W S.T. 8/33a (v.c)
- 501. T.27.10 (v.a) W Chi ku 6/13b (v.a)
- 502. T.27.10 (v.b) W Shao (27/3b) (v.b)
- 503. T.27.10 (v.c) W S.T. 8/32b (v.c)
- 504. T.27.10 (v.d) W S.T. 8/32a (v.d)
- 505. S.27.11 (v.d) W Rubbing (v.d)
- 507. S.27.11 (v.d) W S.T. 4/5b (v.d)
- 511. S.26.6 (v.d) W Hsiao p.59 (v.d)
- 512. S.26.6 (v.d) W Hsiao p.59 (v.d)
- 513. S.26.6 (v.d) W Hsiao p.59 (v.d)
- 514. S.26.6 (v.d) W Fu ch'ai p.28 (v.d)
- 515. S.26.7 (v.d) W Po ku 1/7a (v.d)
- 516. S.26.7 (v.d) W Hsi ch. 3/20b (v.d)
- 517. S.26.7 (v.d) W Hsi A 1/13b (v.d)
- 518. S.26.7 (v.d) W Hsi B 1/10b (v.d)
- 520. S.26.7 (v.d) W Liang 1/3b (v.d)
- 521. S.26.7 (v.d) W Chi ku 1/12a (v.d)
- 524. S.26.9 (v.d) W S.T. 8/30b (v.d)
- 525. S.26.9 (v.d) W S.T. 8/30b (v.d)
- 528. S.25.2 (v.d) W S.T. 17/15b (v.d)
- 529. S.25.2 (v.d) W S.T. 4/5a (v.d)
- 530. S.25.2 (v.d) W S.T. 4/5a (v.d)
- 532. S.25.2 (v.d) W S.T. 4/5b (v.d)
- 533. S.25.2 (v.d) W S.T. 8/22b (v.d)
<table>
<thead>
<tr>
<th>No.</th>
<th>Date</th>
<th>Page</th>
<th>W</th>
<th>S.T.</th>
<th>Page</th>
<th>W</th>
<th>S.T.</th>
</tr>
</thead>
<tbody>
<tr>
<td>707</td>
<td>18.9</td>
<td>5/11a</td>
<td>W</td>
<td>S.T.</td>
<td>5/11a</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>708</td>
<td>18.10 (v)</td>
<td>13/37b</td>
<td>W</td>
<td>S.T.</td>
<td>13/37a</td>
<td>C</td>
<td>Shih no. 15</td>
</tr>
<tr>
<td>709</td>
<td>18.10 (1)</td>
<td>13/37a</td>
<td>W</td>
<td>Shang</td>
<td>279</td>
<td>E</td>
<td>Chi ku 7/32a</td>
</tr>
<tr>
<td>710</td>
<td>18.15</td>
<td>16.12</td>
<td>W</td>
<td>S.T.</td>
<td>13/37a</td>
<td>C</td>
<td>Shih no. 8</td>
</tr>
<tr>
<td>711</td>
<td>18.16</td>
<td>16.13</td>
<td>C</td>
<td>Shih no. 8</td>
<td>W</td>
<td>Chin W 1/25</td>
<td></td>
</tr>
<tr>
<td>712</td>
<td>T. 17.1</td>
<td>16.13</td>
<td>E</td>
<td>Chi ku 7/32a</td>
<td>W</td>
<td>Rubbing</td>
<td></td>
</tr>
<tr>
<td>713</td>
<td>T. 17.2</td>
<td>16.12</td>
<td>W</td>
<td>S.T.</td>
<td>13/37a</td>
<td>C</td>
<td>Shih no. 8</td>
</tr>
<tr>
<td>714</td>
<td>T. 17.2</td>
<td>16.12</td>
<td>W</td>
<td>S.T.</td>
<td>13/37a</td>
<td>C</td>
<td>Shih no. 8</td>
</tr>
<tr>
<td>716</td>
<td>T. 17.3</td>
<td>16.12</td>
<td>W</td>
<td>S.T.</td>
<td>3/46b</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>720</td>
<td>T. 16.15</td>
<td>16.13</td>
<td>W</td>
<td>S.T.</td>
<td>13/36b</td>
<td>C</td>
<td>Shih no. 8</td>
</tr>
<tr>
<td>721</td>
<td>T. 16.15</td>
<td>16.13</td>
<td>W</td>
<td>S.T.</td>
<td>13/36a</td>
<td>C</td>
<td>Shih no. 8</td>
</tr>
<tr>
<td>725</td>
<td>T. 16.18</td>
<td>16.14</td>
<td>W</td>
<td>Shang</td>
<td>268</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>730</td>
<td>T. 16.18</td>
<td>16.14</td>
<td>W</td>
<td>S.T.</td>
<td>13/36a</td>
<td>C</td>
<td>Shih no. 8</td>
</tr>
<tr>
<td>732</td>
<td>16.19</td>
<td>16.14</td>
<td>W</td>
<td>Ts'ung</td>
<td>7/29a</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>745</td>
<td>16.20</td>
<td>16.14</td>
<td>C</td>
<td>Shih no. 1</td>
<td>W</td>
<td>Rubbing</td>
<td></td>
</tr>
<tr>
<td>746</td>
<td>16.20</td>
<td>16.14</td>
<td>W</td>
<td>Rubbing</td>
<td>W</td>
<td>T.L.</td>
<td></td>
</tr>
<tr>
<td>747</td>
<td>15.1</td>
<td>14.44a</td>
<td>W</td>
<td>T.L.</td>
<td>14.10</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>748</td>
<td>15.2</td>
<td>14.44a</td>
<td>W</td>
<td>S.T.</td>
<td>6/48b</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>749</td>
<td>15.2</td>
<td>14.44a</td>
<td>W</td>
<td>S.T.</td>
<td>6/48b</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>750</td>
<td>15.3</td>
<td>14.44a</td>
<td>W</td>
<td>S.T.</td>
<td>3/31b</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>751</td>
<td>15.4</td>
<td>14.44a</td>
<td>W</td>
<td>S.T.</td>
<td>1/15a</td>
<td>W</td>
<td>S.T.</td>
</tr>
<tr>
<td>752</td>
<td>15.5</td>
<td>14.44a</td>
<td>W</td>
<td>S.T.</td>
<td>7/47a</td>
<td>W</td>
<td>S.T.</td>
</tr>
</tbody>
</table>

### Notes
- V: Volume
- B: Book
- P: Page
- C: Chapter
- T: Table
- W: Week
- S.T.: Section Title
- K.K.H.P.: K.Kap Hsi Hsi P'ing
- S.E.C.: Shih E Chao
- Hsi ch.: Hsi chung
- Rubbing: Rubbing
- Shao: Shao
- Ts'ung: Ts'ung
- Hsi: Hsi
- Shao: Shao
### Addenda to Reference Table of Inscriptions

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1073</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1080</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1090</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1100</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1101</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1102</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1073</td>
<td>87.3</td>
<td>Yün 5/9-11</td>
</tr>
<tr>
<td></td>
<td>75.1</td>
<td>Chin 3.1/74-5</td>
</tr>
<tr>
<td></td>
<td>41.8</td>
<td>CMH A/57</td>
</tr>
<tr>
<td>P.</td>
<td>27.8</td>
<td>Rubbing</td>
</tr>
<tr>
<td>1080</td>
<td>36.8</td>
<td>CMH B/41</td>
</tr>
<tr>
<td></td>
<td>33.8</td>
<td>CMH A/8</td>
</tr>
<tr>
<td></td>
<td>36.17</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>28.8</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>25.18</td>
<td>ST 4/6a</td>
</tr>
<tr>
<td>P.</td>
<td>22.10</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>21.24</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>19.12</td>
<td>Cull p.72</td>
</tr>
<tr>
<td>P.</td>
<td>19.11</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>18.17</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>18.1</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>15.17</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>10.15</td>
<td>Rubbing</td>
</tr>
<tr>
<td>1090</td>
<td>10.14</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>9.22</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>5.21</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>5.20</td>
<td>Rubbing</td>
</tr>
<tr>
<td></td>
<td>5.19</td>
<td>S.T. 6/33b</td>
</tr>
<tr>
<td></td>
<td>4.24</td>
<td>S.T. 13/8b</td>
</tr>
<tr>
<td></td>
<td>4.23</td>
<td>S.T. 13/8b</td>
</tr>
<tr>
<td></td>
<td>4.22</td>
<td>S.T. 7/8a</td>
</tr>
<tr>
<td></td>
<td>4.21</td>
<td>S.T. 6/26b</td>
</tr>
<tr>
<td></td>
<td>3.45</td>
<td>S.T. 12/58b</td>
</tr>
<tr>
<td>1100</td>
<td>3.44</td>
<td>S.T. 11/13a</td>
</tr>
<tr>
<td>1101</td>
<td>3.43</td>
<td>S.T. 7/5b</td>
</tr>
<tr>
<td>1102</td>
<td>3.42</td>
<td>S.T. 6/19b</td>
</tr>
<tr>
<td>1103</td>
<td>3.41</td>
<td>S.T. 6/19a</td>
</tr>
</tbody>
</table>
SECTION ONE.

An examination of the nature and reliability of previous investigations of the extent of forgery in the corpus of inscribed bronze vessels.

Although Chinese scholars have for many centuries interested themselves in the study of archaic inscriptions and have published numerous works dealing with various aspects of Shih Shih Hsueh, there is to be observed by the careful reader of their researches a certain degree of shallowness pervading their scholarship, the significance of which has never been adequately explored. Western scholars, too, have entered the field and, for the most part, have been content to continue their investigations along much the same lines as that of their oriental colleagues. No reliable revision of older studies has been attempted and recent scholars, many of whom have been trained in modern research technique, continue to accept without question the asserted authenticity of the inscribed bronzes illustrated in the great repositories, notwithstanding the almost entire lack of proper attestation.

As an introduction to the problems of the determination of forgery in this field no better starting point might be selected than that of a critical study of the research techniques applied from earliest times. It is necessary that the calibre of former scholars as students of archaeological documents be
assessed; their attitudes and approaches as art connoisseurs or as specialists in the archaic script is a matter of lesser importance. If their knowledge of ancient artifacts was sufficient to prevent their being duped by fakers, the reliability of the materials and of the conclusions that they have drawn from them need not be held excessively in doubt. Unfortunately, however, their approach has been aesthetic rather than historical and the archaeological interest of the Chinese has been confined almost entirely to epigraphic investigations; the collecting of bronzes became the recreation of wealthy men, who, although often genuinely interested in the objets d'art they assembled, were generally in no secure position to test the authenticity of the articles. Some were scholars and published catalogues incorporating the results of their investigations on the inscriptions; other scholars, lacking the wherewithal to build their own collections, worked from rubbings and usually accepted the opinions of the owners in regard to the authenticity of the original vessels. Behind this scene, representative of Sung, Ch'ing, and even comparatively recent times, lurked the dealer, the grave-robber, and the forger.

1. Forgery in Sung Times.

It has been stated that bronze vessels of Shang and Chou were excavated in large numbers in Sung times, particularly from the period of Huang Yu (1049-54) when the casting of imi-
tations based on archaic styles was undertaken by imperial command and apparently continued in several succeeding reigns. Although records exist of details of the discoveries made, they are, for the most part, merely concise statements such as 'obtained from Ching Shih' the authority of which is unknown; in a few cases added detail may be found, e.g. the Cheng Fang Ting (K'ao ku t'u, 1/14a) is described as having been discovered by a peasant while tilling his fields. Such accounts are probably no more reliable than similar recordings of later times; the famous Mao Kung Ting, for instance, was 'unearthed in Chi Shan during the last years of Tao Kuang (circa. 1845-50)' but the testimony may be traced back only to its first owner. The finds in most cases were accidental (Jung Keng, op.

1. See Jung Keng, Shang chou yi ch'i t'ung k'ao, p. 183. In the Li chih section of the Sung shih (chuan 51, p. 36) reference is made to the official requests for archaic vessels throughout the Empire on the basis of which copies were made for use in the temples. Later in the Cheng Ho period (1111-1118) similar activities were practised and careful investigations of the characteristics of the ancient vessels were made at the instigation of the Emperor (Ti Ch'i-nien, Shou shih, pp. 1-4).

The practice of manufacturing archaic-style bronzes was not restricted to Sung times; reference is made to such activity in T'ang, Ming, and Ch'ing times in extracts quoted in later pages. Further evidence may, no doubt, exist; the point is of immediate importance, for the knowledge and skill required in producing honest imitations of ancient vessels would be little greater than that employed in dishonest manufactures, while the fact that the art of bronze casting was known and practised in the centuries preceding the development of interest in archaic bronzes in Sung times does not preclude the possibility that forgeries may also have been produced to meet whatever demand may have existed then for antiques.
cit., pp. 6-7) and no active measures to excavate tombs were made; an early Western collector of bronzes has written:

'After the accession of the Sung dynasty in 960, old bronzes were no longer regarded as sacred, the tombs of noble families were excavated for private collections and imperial museums, and epigraphic studies were industriously prosecuted, as proved by the many illustrated catalogues of the period...' (S. W. Bushell, Chinese Art, vol. 1, p. 68).

But this is not entirely true; the vessels were still regarded with considerable awe and although grave-robery (intentional or accidental) was doubtless a feature of the period, official sanction was never given to excavate tombs. The discovery of hidden treasures was not always a happy event; in his admirable Yin hsu fa ch'ueh Hu Hou-hsuan quotes a contemporary record of the second year of the Sung Yuan Feng period (1080) when a Shang period tomb opened as a result of flooding of the Anyang River. The peasants searched within and obtained ancient bronze vessels in good condition but rather heavily patinated. Fearing official action would be taken against them they did not dare to dispose of them all by sale, and accordingly smashed the vessels and sealed up the entrance hiding all traces of the grave (p. 7). Numbers of genuine vessels were probably discovered in such ways and by devious means came into the hands of collectors; organised looting or excavation of graves was certainly not permitted. Vessels which became available were
eagerly sought and high prices were paid (Jung Keng, op. cit. p. 161).

It had been customary to present to the Emperors all archaic vessels discovered by chance from time to time; the Histories from Han times onwards record such discoveries and presentations, but in the Sung period catalogue, the K'ao ku t'ü first published late in the eleventh century, the names of 36 families with private collections of antique bronzes are noted. In this period a great deal of research on the ancient script was conducted and the subject of Chin Shih Hsueh was firmly est-
established; no less than 32 titles of works are listed in the Chou shih, all concerned with the collection and interpretation of ancient texts inscribed in stone and bronze.

Meantime, forgers had been at work and although their products must have been considerable and of a reasonably high standard as a result of the extensive bronze casting of imitation archaic vessels, there appears no record of any doubts held as to the authenticity of current archaic bronzes until the mid-12th century, when Ti Ch'î-nien was first to draw attention to existence of forgery; the case he describes appeared in one of the first catalogues of bronzes to be compiled, comprising items in the Imperial Collection - the Huang vu san kuan ku ch'i t'u (dated 1052), a work now lost:

'The Jui Ting-vessel which came up from Hsing Chou listed first (in this book) is constructed without method. The animal heads on both sides (of the vessel) clutch in their mouths a round ring; the three legs are made of supporting animals of a different kind; it is strange and unorthodox. I do not know upon what basis that it is termed a vessel of the Three Dynasties.' (op. cit., p. 11).

Chao Hsi-ku in his T'ung t'ien ch'ing lu chi presents a chapter on ancient bronze vessels in which he discusses the characteristics of both genuine and faked vessels; a long section of his writing incorporating his views on both is quoted here. The extract is particularly important as it embodies the ear-
liest detailed account of such matters and in respect to his awareness of forgery illustrates a considerable advance in the critical study of the inscribed vessels:

'Bronze vessels that have been interred under the earth for a thousand years appear pure green as though covered over with kingfisher (feathers); in the forenoon their colour is somewhat insipid; in the afternoon it exudes a negativeness and the kingfisher green glistens as if it were about to trickle away. In places there is evidence of corrosion by the earth - sometimes (appearing as if) bored, sometimes as flakes - both are as natural in appearance as the trails of a snail. If there are traces of cutting or chiselling, then they are forgeries. Bronze vessels that have been immersed in water for a thousand years are pure emerald in colour with a jade-like lustre. Those that have

4. It is difficult to decide whether Chao Hsi-ku intended to mean 'blue' or 'green' and the character 黒, although often compounded in the sense of 'blue', is sufficiently ambiguous in regard to the two colours to offer little assistance in solving the problem here. Bronze patina in existing examples may be generally described as green (leaving aside colours that are neither green nor blue); patina that is entirely in blue is extremely rare. With this observation in mind one might feel justified in rendering 'green' as the meaning originally intended above. H. A. Giles in his translation of the same passage (Adversaria Sinica, pp. 291-96) has 'blue' which is possibly correct if 黒 is taken literally as 'kingfisher'; however, without attempting an ornithological study we tentatively follow the Ueda Daiiiten notes on the character, which appear to suggest that the bird (or some species of the bird) was not necessarily blue in colour: 黒 黒 黒。 If, on the other hand, it could definitely be shown that Chao was describing bronzes that were actually covered with blue patina, then it would indeed be remarkable that the bronzes excavated in Sung times were covered with blue patina as contrasted with the green of recent times.
'not been immersed for so long a period as a thousand years are emerald green but lack the lustre. Their corroded areas are like the previous vessels’. Nowadays everybody regards vessels in these two groups which are light in body as being ancient, not realizing in particular that there were large and thick vessels whose metallic nature has not been exhausted - their weight having been diminished only as much as a third or a half. Small and thin vessels easily have their metallic nature exhausted by the agency of moisture and soil gas, and where they are most broken by the blows of hoes (before their discovery by farmers) there is not the least sign of metallic bronze colour; only the green patina penetrating right to the bone; sometimes there is a streak of red colour inside like cinnabar and there still remains a metallic sound.5.

5. The description here of the bronze metal having almost completely changed into patina presents definite proof that vessels of extreme age were found from time to time for this characteristic cannot possibly be faked. That vessels exhibiting little corrosion were sometimes suspected as fakes in Chao’s time is an interesting point to remember when we turn the pages of recent illustrated catalogues wherein heavily and deeply corroded vessels seldom appear - it is particularly noticeable in the cases of those with long inscriptions. Of course, genuine vessels exhibiting little effect of corrosion have been excavated scientifically and lack of corrosion is by no means a criterion of forgery, but in the cases of forged vessels such a characteristic is to be expected; where the patina appears to be deeply ingrained scientific analysis may result in determining the authenticity of the vessels but again, in the absence of such examination being applied, it must be remembered that patina of this nature can be produced artificially.

Giles’s translation is a little at fault here; he connects the present and the following paragraphs as: "... retaining the sound of bronze, such a piece is an antique which has not been immersed in water, but has passed from collector to collector.” (p. 292); there is no support for the underlined words in the original text nor does the general context permit the connection he has made.
'Those that have been transmitted down from antiquity and have not yet entered water or earth but have passed through the hands of men, have the colour of purple serge and a red sand-like mottle; those that are excessively so have the mottle protruding and appearing like first class cinnabar. When placed in a cauldron of hot water and boiled, the mottle becomes all the more visible. Forged vessels have this effect produced by a mixture of lacquer and vermillion - they are easily detected.

Ancient vessels of the Three Dynasties do not possess the least rank odour, only those newly excavated have an earthy smell; in time this disappears. If the vessel is a fake and is rubbed with the warmed palms of the hands a fearfully malodorous smell of bronze arises.

The Inscription Characters.

In the script of the Hsia dynasty "bird-foot" characters were employed; in the Shang period, "reptilian fish" characters; in the Chou period they employed the "reptilian fish" characters and the Great Seal characters. During Ts'in (B.C.255-206) the Great and Small Seal characters were used; Han (B.C.206-A.D.221) employed Small Seal characters and the Li Shu script. During the period of the Three Kingdoms (A.D.221-265) the Li Shu script was used. From the Chin dynasty (A.D.265) and the Liu Sung dynasty (A.D.420) onwards, the K'ai Shu was employed; T'ang (A.D.618-907) employed the K'ai Shu and the Li Shu. During the Three Dynasties they had intaglio inscriptions (Chih) known as "Yen nang", the characters being below the metal surface; from Han times eilievo inscriptions (Chih) - the characters rising above the metal surface, occasionally intaglio inscriptions (Chih), and inscriptions (Chih) incised by knife as in stone tablets was employed.6

6. The sense in the original text is a little obscure. Giles
Now, intaglio inscriptions (Chih) in bronze are difficult to cast, while rilievo inscriptions (Chih) are easily accomplished. Rilievo inscriptions (Chih) are definitely not characteristic of the Three Dynasties.

K'uan Chih:

Characters engraved in Seal form were used to record deeds of merit - this is termed the inscribing of bronze vessels. K'uan is the decor and is ornamented in relief; the K'uan of ancient vessels appears.

6. has: "... the inscriptions were either in rilievo, the characters projecting above the surface of the metal, with some intaglio characters among them." (p. 292); our above interpretation is made on the basis of known examples (we have seen no inscription of Han times made up of a mixture of intaglio and rilievo characters), and it may be noted that Jung Keng in quoting this paragraph (Shang chou yi ch'i t'ung k'ao, p. 194) has a semi-colon placed after "漢以来或用陽識,其字凸;間有凹者,或用刀..." which suggests that he has taken the same stand.

7. Giles translates this as: "... the latter being a sure proof that the bronze in question is not a genuine antique." (p. 293). This seems to read a little more than is warranted in the text - it is doubtful that Chao Hsi-ku would, for instance, class Han period bronzes with rilievo script as fakes! Giles is concerned here with proof that the incised inscription of the 'Bushell Bowl' (ins. 236.1) could not have been executed in Chou times. Although examples of cast and engraved intaglio inscriptions have been scientifically excavated from Western and Eastern Chou sites in recent decades - a fact available to neither Chao nor Giles - the latter's suspicion of the 'Bushell Bowl' text because it is 'clearly incised with tools' is nevertheless not without certain support.

8. The present section is at first glance obscure; the four characters 款識篆字 might be translated as Giles has done: "Inscriptions in seal characters, both chih and k'uan." (p. 293). However, we consider that the first two form a paragraph heading which in the Ts'ung shu chi ch'eng edition has not been differentiated from the first sentence of the paragraph. The preceding paragraph is headed with the title 譯文.
In his book, *Fakes*, Otto Kruz after quoting this same section from Giles's translation, continues to observe: 'The statement that inscriptions were invariably cast with the vessel is important. It is extremely doubtful whether there are any exceptions to this rule.' (p. 203.) Kruz would necessarily class the Shou Hsien inscribed bronzes as forgeries.
'on the outside surface in relief. Chih, the inscription text, appears in the inner surface of the vessel in intaglio. Vessels of Hsia and Chou have both K'uan and Chih (decor and inscribed text); Shang vessels are often without K'uan but have Chih.

The ancients were unfailingly artistic

8. 'The Inscription Characters'; the present is concerned with the term K'uan Chih and is in effect an analysis of this compound term which generally means 'inscription' and often forms part of the titles of catalogues of inscriptions: Li tai chung ting yi ch'i k'uan chih fa t'ieh, Chi ku chai chung ting yi ch'i k'uan chih, etc. Chao Hsi-ku explains K'uan as the decor and Chih as the engraved text of the inscription, and employs both characters singly throughout his writing in their two meanings so defined. Giles in translating this paragraph has apparently consulted a text punctuated with a stop after the fourteenth character, namely, K'uan; Jung Keng in his punctuation places the stop before K'uan (p. 194) - the Ts'ung shu chi ch'eng edition has the stop after K'uan. Jung's punctuation seems decidedly correct and is followed above. Giles's translation reads: "Inscriptions in seal, both chih and k'uan are used to record merit. The k'uan style as seen on bells and cauldrons, is an ornamental form in rilievo. In the case of antiques, the k'uan inscription is on the outside and in rilievo; the chih inscription is inside and in intaglio. Articles of the Hsia and Chou dynasties have both k'uan and chih; articles of the Shang dynasty are mostly without k'uan but have chih." (p. 293). The absurdity of regarding K'uan and Chih as inscription types is immediately evident when one peruses the Sung Catalogues - nearly all outside engraving takes the form of decor and in most cases is in relief; the only engraving found in the interior of the vessel is in the form of an inscription which is always in intaglio. There is no example of vessels with inscriptions on both sides in the illustrated Sung Catalogues amongst those dated as Shang or Chou. Chinese dictionaries confuse the two characters badly; the Ts'iu yüan, for instance, under the character K'uan states that K'uan is on the inside and in intaglio, Chih on the outside and in rilievo; under Chih we are informed that Chih is in intaglio and K'uan in rilievo! Both characters are always regarded as a form of inscription. K'uan is nowhere defined as decor other than in the present essay - a point that has apparently not been noticed by the dictionary compilers.
and delicate in their work. Artisans were classed among the four ranks of society, quite unlike the contemptuous attitude prevailing against workmen of later ages. Thus the decor (K'uan) of archaic vessels is necessarily fine as hair, evenly spaced and clearly divided without blurring of detail. The character strokes of the engraved script (Chih) are as graceful as curved roof tiles (?), and are not deeply cut — they maintain a constant size and depth, and are clear and evenly spaced without the least blurring of detail. This was because, one, the metal they employed was of the finest quality and quite free from grit; two, fine and delicate workmanship; three, time and labour were not begrudged and they were not produced in a day. Now when we see the decor and inscriptions (Kuan Chih) of archaic vessels which appear rather indistinct, they are necessarily forgeries. Their colour and odour is likewise unlike (that of genuine vessels).

Bronze vessels (excavated) from Chu Yung are not antiques but date from the T'ang T'ien-Pao period (742-756) to the last reigns of the Southern T'ang period (circa 900) during which official foundries were established in Chu Yung Hsien, Sheng Chou (Kiangsu) in order to cast them. Thus these vessels often contain official stamps; although their lightness, dark lacquer-coloured finish, and delicate decor (K'uan) is quite pleasing they are not really archaic vessels. The oldest of them have formed green patination and the round P'ing-vessels with large phoenix decor of the T'ien Pao period which have come to light at various times are the best examples.

The method of faking archaic bronzes is achieved by an application of quicksilver and tin-powder — the chemical mixture now used to coat mirrors. This is firstly applied uniformly on to the surface of the new bronze
'vessel, afterwards a mixture of strong vinegar and fine sand powder is applied evenly by brush; it is left until the surface colour is like that of dried tea, then it is immediately immersed into fresh water and fully soaked. It thereby becomes (permanently) the colour of dried tea; if it is left until it turns into a lacquer-like colour and immediately immersed into fresh water and soaked, it thereby becomes (permanently) the colour of lacquer. If the soaking is done somewhat carelessly the colour will change. If it is not immersed in water it will then turn into a pure kingfisher-green colour. In each of these three cases the vessel is rubbed with a new cloth to give it lustre. Its bronze malodour is covered by the quicksilver and never appears; however, the sound of old bronze is dainty and clear, while the sound of new bronze is turbid and clamorous — this cannot escape the observation of the connoisseur.

Ancient vessels that have long been under the earth deeply absorb the essence of the soil and when employed in nurturing flowering plants (i.e. used as flower-pots) the colours of the flowers become bright and fresh as at the heads of branches; they bloom earlier and fade later. Some, after the petals have fallen, will bear fruit in the vase. Vessels that have been transmitted (through the hands of men and have not been buried) have not this power. Pottery which has been buried for a thousand years, however, is likewise (impregnated with earthy essence).

Ancient bronzes are often able to ward off evil influences and should be kept in all homes. The spirits of the hills and streams have obtained their powers of evil over the passage of many years, but the various types of bronze vessels of the Three Dynasties surpass them in age and because of this are able to ward off their evil influence.
Fan Chung-yen (A.D. 989-1052) had in his home an ancient mirror on the back of which were the 12 two-hour periods of day like the pips used in the game of Po-ch'i. As each of these in turn came to denote the hour of the day, the centres of the pips concerned grew bright as the moon - this continued 'around the clock' without fail. There was also in the home of another gentleman a 'twelve-hour bell' which could according to the time of the day strike the hours itself. Do these facts not illustrate the supernatural powers of the ancient vessels? ....

The ancients put inscriptions (Chih) in bronzes and sacrificial vessels only to honour merit or glorify virtue; in P'yan vessels and Yu-vessels matters of a moral nature were inscribed (Chih). Although other vessel-types were without inscriptions (Chih) it must not hastily be concluded that they are not ancient. However, they may be sufficiently determined (as authentic upon the basis of) their physical characteristics, their decor (K'uan-wen), their colour, and their odour ....' (T'ung t'ien ch'ing lu chi, Ts'ung shu chi ch'eng, no. 1552, pp. 11-15. Also quoted in T'ao Tsung-yi's Cho keng lu, no. 0219, vol. 2, pp. 246-7).

Chao was writing in the early half of the 13th century, nearly 150 years after the publication of Ou-yang Hsiu's Chi ku lu pa wei, (1050-70), Liu Pi's Hsien ts'in ku chi'i chi, (1063), Lü Ta-lin's K'ai ku t'iu, (circa 1090), etc. Ti Ch'i-nien's Chou shih incorporating the extract quoted previously, was written nearly 70 years after these publications, thus both accounts of forgery reflect the views of considerably later times. The early compilations merely listed the vessels and
inscriptions (illustrations presented in most cases) together with transcriptions and short commentaries on the inscriptions. Other details such as records of ownership, provenance and measurements appear but no indication is given of the steps taken to test the authenticity of the vessels. Preceding his quotation of the above passage T'ao Tsung-yi introduces also an extract from a work of the Sung scholar, Fan Yi-chang, which is most valuable in its description of the making of 'hand-copies' and 'tracings' such as appear in the Sung Catalogue reproductions. A long list of terms describing various kinds of decor and various classes of vessels bears witness to the emphasis of Sung scholarship in this direction; the Catalogues, of course, illustrate the Sung scholars' pre-occupation with the interpretation of the ancient texts and their attempts to assess the historical significance of the inscriptions.

Chao Hsi-ku's essay is a most valuable document in its presentation of Sung period attitudes and approaches to the inscribed vessels. In respect to current methods of determining

9. He notes four types of reproduction of which the first two require our notice: is a copy made by eye - the paper is placed alongside the text to be copied; the reproductions in the Li tai Catalogue were made in this way. is a tracing made by placing a thin sheet of paper over the inscription then drawing in the characters by brush; the Hsiao t'ang Catalogue reproductions were made by this method probably on the basis of rubbings taken from the inscriptions. It would not always be possible to make a tracing directly from the original inscription because of its often awkward placement in the vessel.
fakes and the description of characteristics accepted as those of authentic vessels his writing is a highly illuminating commentary on the knowledge that prevailed in his time. It is unnecessary to draw detailed attention to the obvious inadequacies permeating his account and to the extremely fanciful ideas regarding archaic bronzes that he and, no doubt, most of his colleagues, were prepared to accept. The description of patina changes from morning to evening, the sounds of genuine archaic bronzes as contrasted with those that are faked, the magical properties of the vessels, etc., although matters that no one would now accept seriously, illustrate, nevertheless, important aspects of medieval thought which tend to be overlooked by scholars who have made somewhat halfhearted attempts to assess the extent of Sung knowledge of the inscriptions. All are prepared to accept the majority of the inscriptions listed in the Sung Catalogues as being authentic articles regardless of the fact that the early scholars who examined them were no better qualified than Chao Hsi-ku in regard to the determination of forgery.

His reference to T'ang period manufactures of archaic-style vessels is a most important point for it indicates that similar attempts to produce ceremonial bronze vessels modelled on what were believed to be archaic styles took place long before Sung times. It is most unfortunate that we know very
little about these early activities.

The criteria which Chao advances may be briefly summarised as:

(a) appearance of cutting or chiselling in the bronze surface,
(b) patination effects artificially produced by lacquer and vermillion,
(c) an odour of bronze produced when the vessel is slightly warmed,
(d) decor and inscription detail which is coarse, uneven, deeply cut and of little aesthetic quality,
(e) colour of vessel and of patination,
(f) sound of vessel when hit is turbid and clamorous.

Genuine vessels should manifest the characteristics of patination which he rather fancifully describes, there should be evidence of corrosion - flaking and pit-marks of natural appearance; only recently excavated should possess an odour; the workmanship of the decor and of the inscription should be of finest quality, and the sound of the metal should be dainty and clear. Vessels with the bulk of the original metal remaining need not necessarily be forgeries.

If such features as these were cautiously considered by forgers of the period, and texts reasonably archaic in style were compiled and engraved in archaic characters on the vessels they created, there would have been little difficulty in
duping experts of the calibre of Chao Hsi-ku who would determine the authenticity of the products merely upon the basis of physical characteristics very easily produced by clever craftsmen. Eleventh century collectors and scholars were certainly no better qualified in this respect, and have left no record of any doubts they may have held of the reliability of current bronzes. They were interested in the types of inscriptions that were employed in the ancient periods and studied all available materials in an effort to solve this question; forgers were in a better position as they could invent what was not generally known and adopt current views of what should be characteristic of archaic script. As far as the inscriptions were concerned, no great difficulty faced unscrupulous fakers; such a great student of the archaic script as Yang Nan-chung was content to accept the inscribed vessels with little thought as to their possibly being fakes and proceeded to engage in studies of them, noting their characteristics as features of the pre-Ts'ин script. Genuine vessels with inscriptions as well as forged inscribed vessels contributed to the materials examined, and as a result inaccurate views of the archaic script became current. In the following description of the pre-Ts'ин script as recognised by Yang may be noted a number of features which are common to spurious inscriptions, but are lacking in attested examples: 'loan character' usage (see p. 392), simple and primitive forms, lack of 'radicals'; on
the other hand, it is obvious that genuine inscriptions played a more than minor part in the materials studied:

'Those who have understood archaic characters since Han times have been few; of the characters that have been transmitted (from antiquity) scholars of the calibre of Ku K'uei and Hsü Shen often omit explanations of them. Many phenomena of antiquity differ from those of today thus we cannot thoroughly comprehend the original meanings of the characters they constructed. Characters which have not been transmitted sometimes appear now in ancient vessels without any evidence as to their proper interpretation and it is difficult to define their meaning. Generally speaking, archaic characters often lack radicals and tend towards simple and primitive forms ... used as 'loan characters' ... In ancient writing two characters are often combined as one ... the sounds of many ancient characters differ from those nowadays ... unusual radicals and phonetics which have not come down to us appear and cannot be paralleled when we search amongst the Small Seal forms, and when we now examine them there seems to be cases where contemporaneous writers and founders were not necessarily without error ...'

(Yang Nan-chung's commentary on the Tsin Chiang Ting as quoted by Ou-yang Hsiu, Chi ku lu pa wei 1/5a-6b), 10.

10. It is quite instructive to read through the first section of this work for it illustrates the comparatively high standard of scholarship brought to bear upon the interpretation of the inscriptions - it may be favourably compared with the commentaries of Ch'ing and recent writers. In this extract Yang shows an astuteness of observation in respect to the script, and in other portions of the work his methods of interpretation have set the standard approach followed by most later scholars. Recent writers tend to condemn the Sung compilers merely because the inscriptions reproduced do not accord in character shapes and structures with those in inscriptions 'discovered'
With a knowledge of these required characteristics forgers had little difficulty in catering for the heavy demands of Sung collectors for archaic vessels containing suitable inscriptions. If errors appeared in the archaic text the chances that they would cause suspicion to fall on the inscribed vessel were quite remote.

In Sung times the stage was fully set for the production of forgeries on a relatively large scale: little was known about the archaic script or about the types of inscriptions that were actually cast in the early dynasties, even as respects the vessel types there was no great surprise expressed when vessels 'unlike those drawn in the san li t'u or in private collections' (Chikku lu pa wei, 1/8a) came on the scene. Large sums of money were paid for individual vases, the Imperial desire to produce imitation vessels for the Temples resulted

10. during the last century or so; there is reason to believe, however, that the reproductions in the Hsiao t'ang Catalogue (Sung edition) are accurate tracings of the original inscriptions, and that these inscriptions exhibit suspicious features simply because they were compiled and executed by people who had only a limited knowledge of the ancient script. In other words, it is our opinion that a considerable number of them are forgeries produced in the 11th century. Upon application of the principle of constancy of character structures, for instance, many of the Sung Catalogue inscriptions have been discovered to be spurious. Material of this kind was uncritically accepted by Yang and his contemporaries without the least attempt to test its authenticity in any effective way; indeed, it would be most remarkable if scholars of so early a period had developed a suitable method of determining forgeries. Their credulity is a feature that must be expected and taken carefully into account by modern scholars when examining the documents which the Sung scholars revered as the remains of high antiquity.
in extensive searches for archaic vessels and in studies of the characteristics of available vessels and of relevant information in the classics. It would be most unusual if even enterprising officials of the period did not privately instigate the production of fakes to appease the Imperial demand and at the same time further their own advancement. Casting of bronze was by no means a lost art, and Chao Hsi-ku has recorded details of the process as he understood it:

'The ancients in their casting of vessels always commenced by constructing in wax a model of the ultimate vessel and upon this they added the decor and the text of the inscription, cutting out the drawings (of these). After this they took a small wooden container, larger and somewhat wider (than the model) and placed the model within it; the joins of the bottom of this wooden container were made so as water could seep through packings of silk thread. A mixture of pure clay and water with the consistency of thin gruel was poured over (the model) once daily - they waited until it was dry then again poured the mixture over it - this was done until the whole surface of the model was completely covered. Then the bindings of the

11. In the Fu hsuan ye lu, Ts'ung shu chi ch'eng, no. 1552, p. 1, an interesting statement appears: 'Anciently inscriptions and decor on vessels of gold, bronze, etc. were all engraved after the casting was completed, quite unlike those cast directly from engraved models as practised by craftsmen nowadays.' The Sung writer of this short calligraphic study is obviously referring to the cire perdue process in respect to the casting of inscribed bronzes and speaks of it as a contemporary practice; it is a great pity, however, that he does not amplify his first statement at greater length - it would be interesting to know if pre-Ts'in bronze vessels are also included in his generalisation.
'wooden container were untied and the boards taken away. Immediately fine yellow earth, salt and paper pulp were firmly kneaded around the outer surface of the clay-encrusted model. Over this, yellow earth was added to a thickness of two inches. An opening was left and molten bronze was poured inside. However, perfection was not achieved in one casting, this is the reason that they were (highly) valued.' (op. cit., p. 12).

In general principle his account of the cire perdue process is correct but there is reason to doubt that the cire perdue process was employed in Shang and Chou times - he is essentially describing current methods. The major problems confronting the

12. The last sentence is rather off the mark in Giles's translation which reads: 'This method is not certain to yield success at the first attempt, which is the ideal result.' (p.294). Chao is simply pointing out that more than a single casting was usually required (we assume that he insinuates the reconstruction of a new model and a new mould for successive attempts, because obviously the first mould must be destroyed to free the casting, and if it should be imperfect, the whole process must be repeated again), and for this reason the vessels so laboriously manufactured obtained a greater intrinsic value. The Chinese text reads: 此所以為貴也, which can hardly be rendered as 'the ideal result'.

13. Anyang moulds are of such a nature that it is obvious that wax had no part in the modelling of the vessels. While in Formosa we were shown a fragment of a vessel model made in clay with the major portions of the design carved in it; mould fragments show traces of further engraving (or of added impressions made while still damp?) It seems thus that a model of the vessel was made in clay with the major elements of the decor engraved in it; mould sections were made from this and some minor details of decor were carved into the sections; when assembled together casting proceeded. Shih Chang-yü's recent study 'Bronze Casting in the Shang Dynasty' (Bulletin of Academia Sinica, Vol. 26, 1955, pp. 95-129) confirms our views as generally expressed here. A detailed and reliable account of the use of
forger were:

(a) the type of vessel to design,
(b) the type of inscription to insert in it,
(c) how to achieve the effects of aging.

The first two difficulties were being resolved for him by contemporary scholars; the problem of aging the bronze was merely a matter of experiment; Chao's description of the process is hardly a reliable one, for it is unlikely that forgers would freely impart all details of so important a 'trade secret'; however, his awareness of the practice of forgery is the significant feature - together with the other Sung period writers we have quoted he has recorded the setting and with them appears in the heroic roles of a drama in which later scholars have found no villain: Chao has presented us with ample evidence of the existence of such a character and in a setting where the villain could not fail to be one of the first characters to make an appearance.

Very few of the inscribed bronzes listed in the Sung

13. the cire perdue process of casting will be found in Sung Ying-hsing's *T'ien kung k'ai wu*, chung chüan, p. 18 ff. with interesting illustrations. This work was first published in the late Ming period. Chao's preoccupation with the cire perdue process seems to suggest that the vessels he was familiar with were manufactured by this process. Whether the cire perdue process was employed in Shang or Chou times is not yet definitely known, mould fragments and even the vessels from recent excavations show clearly enough that they are not connected with this process. See O. Karlbeck, *Anyang Moulds*, B.K.F.E.A. No. 7, pp. 41-2.
Catalogues are accompanied by acceptable testimony of their discovery; most of those with such information illustrate clearly that it is at the best only second-hand and in the circumstances to be classed as unreliable. A mere statement of the vessel's discovery with no record of when it was unearthed or by whom it was found is a feature characteristic of an antique-dealer's patter rather than of a trustworthy account. It may be wondered upon what grounds, therefore, a Western sinologist has asserted that:

'In Sung time the knowledge of archaic art and epigraphy was still too little developed to allow of forgeries on any considerable scale or of a quality calculated to deceive.' (B. Karlgren, *Yin and Chou in Chinese Bronzes*, B.M.F.E.A., 8, p. 16.

A cursory glance through Ti Ch'i-nien's *Chou shih* will illustrate the remarkable number and variety of publications pertaining to Chin Shih Hsüeh that were available to forgers and scholars alike. With the art of printing at its height this knowledge was there for all who were interested to capitalise on it in whatever way they wished. The general opinion that the Sung Catalogues seldom present any forgeries is merely based upon an assumption that it was too early a period for such dishonest activity to begin; the facts before us allow no such idle specu-
lution at all.

2. Forgery in the Yuan and Ming Periods.

From Sung times to the late 18th century, interest in archaic bronzes seems to have diminished greatly; no catalogues were printed other than re-editions of the Sung Catalogues. No doubt collections of vessels were made but of these we know nothing. A Ming period writer, Kao Lien, has, however, recorded details of forgers' methods which had come to his notice, and we may assume from his general discussion that the collecting of archaic vessels was by no means a lost interest in his times:

'Recent forged vessels - Ting, Yi, Hu, Ku, Tsun, and P'ing types - from Shantung, Shen Hsi, Honan, Ch'in Ling and such places are all patterned upon archaic styles; measurements are not neglected and the decor and inscriptions are entirely made from mouldings taken from ancient vessels. Although they (appear) to differ little, nevertheless upon comparison with (genuine) archaic vessels they are quite distinguishable. Although they have been polished to obtain a smoothness, they are rough to the touch; although they contain certain elements beautiful to behold, their general character is vulgar.

The method of faking these: after they are cast they are scraped and polished until they are clean and shining; where the decor has not casted clearly it is engraved by tools. Then the vessel is soaked for a time

14. Various studies of an archaeological type were published, however, but these were concerned with stone inscriptions, seals, the Stone Drum Texts, archaic characters in the Sung Catalogues, etc. (see Jung Keng's Chin shih shu lu mu). The number of Ming titles of transmitted books is almost the same as that from Sung
in a mixture of well-water, clay and alum; taken out and baked, again immersed and again baked. This is done three times. It is called 'making the foot (basic?) colour'. When the vessel is dry a solution of ammonium salt, sulphate of copper, kan-shao-shih, Tibetan borax, gold-thread-alum - all powdered - and fresh salt water is applied by a clean brush two or three times and after one or two days is washed away; again dried and again washed. The whole process is in adjusting the surface colour, and the amount of washing may have to be done three or five times before it is settled. Next an oven is dug into the earth, red-hot charcoal is heaped in it and strong vinegar is sprinkled on to it; the bronze vessels are placed inside and still more vinegar is thrown over them and they are completely covered with earth and left buried for three days. When taken out and examined they are all found to have grown the colours of ancient patina mould; wax is rubbed over them. When the colour is required to be deepened, they are smoked in burning bamboo leaves. There are two ways, by heat or cold, in which (other colour) details are added to the surface colour; both employ clear gum resin which has exhausted its extremely astringent taste, compounded with melted white wax. For blue-green colour, dark green pigment is put in the wax; for green, ssu-chih-lu (malachite?) is used; for red, cinnabar is used. Wax is used most in the heat method; for the cold method equal quantities of wax and gum resin are used; with these blended (as required) they make the (added colour) details. For coloured protrusions from the surface they make small mounds of salt, metal filings and cinnabar. The mercury colour is made by an application of mercury and tin on to the sides and edges of the vessels, when covered with wax the colour is hidden and dulled a little in order to dupe the collector. When rubbed in the hands a stench arises which cannot be got rid of even by washing. Sometimes after this process is completed they bury the vessel in .... earth for a year or two, it seems (then) to have archaic characteristics.

14. times, those dealing with inscribed bronzes were few and for the most part appear as revised studies of material discovered in the Sung period.
'Now when objects of the Three Dynasties, and Han are minus a leg, have a lug broken, or the vessel body is damaged by a hole here, or a piece missing there; these are not forged. Nowadays (broken pieces) can be fused by cold and hot methods. With the cold method of fusing bronze the ancient colour does not change; but with hot soldering (the fused) area is comparatively a little darker than other parts of the vessel. If lead has been used for repairs in conjunction with cold fusing, wax is used to fill up the decor and within the vessel yellow mountain clay is applied thickly to cover up (the joins) appearing as the earth naturally found on excavated articles. Actually archaic vessels are seldom perfect (i.e., complete in all detail); when compared with forged vessels they are greatly different.

Again there are cases of broken fragments of old vessels, each piece (genuinely) archaic, but the construction (of the complete vessel) only is new .... When I was in the capital I saw two (such) vessels; one, known as the Tsu Fu Ting which was small and serviceable; they all liked the lay-out of its decor. It was forged by using the lid of an archaic Hu-vessel as the belly and fragments of broken vessels from ancient graves were fused (together) helter-skelter above it, the lugs of an ancient Ting-vessel were used for its own, and it was finally made (to appear) as a Lu-vessel. It cannot be regarded as an authentic object. The other was a square vessel called the Ya Fu Fu Ting, within and without (it was covered with) quicksilver and there was not a trace of decay on any part of it .... I examined it carefully and saw that it was made from the broken fragments of a mercury-covered square mirror which had been made into square pieces and fused together (by the) cold process to form the four sides; fragmentary lugs and legs of a Lu-vessel completed the object; the workmanship was quite cleverly done ....' (as quoted by Jung Keng, op. cit., p. 195-6).

Kao Lien is particularly concerned with the methods of for-
gers but as respects the determination of forgeries he does not say a great deal - he speaks of those made on the basis of existing genuine (?) vessels and which would appear as direct copies of these; if compared with the originals the deception could be discovered. In the last paragraph above he describes another type of forgery made from genuine vessel fragments re-constructed as an entirely new vessel - again a type easily determined upon careful examination. He notes also, that genuine vessels are seldom whole and expresses the opinion that direct comparison of genuine archaic vessels with those that are faked invariably results in the determination of the latter. Now this is one of the main points to be considered throughout our survey - upon what basis did early scholars determine the authenticity of the vessels which they regarded as genuine articles of the Three Dynasties? The writings consulted so far illustrate perfectly well that the most important criterion applied was that of experience or impression. A more searching examination of the Sung Catalogues and of our other quoted sources will result in no other conclusion than this - the basis of judgement was little more than an expression of what each expert felt was characteristic of genuine ancient vessels; their

15. In the final paragraph quoted by Jung Keng, Kao describes the quality of work of two Yuan period forgers, mentioning them by name. One apparently produced quite clever fakes. He notes also a series of vessel types which were being manufactured in his time as archaic objects but which in fact were certainly not characteristic of pre-Ts' in times.
experience was limited to vessels with little or no testimony of provenance and they were prepared to accept almost any object that accorded with their preconceived views of antiquity. If the vessel appeared ancient, then it was a genuine product of Shang or Chou times - nowhere is it recorded that any other means of determination was applied. Certainly no method of determination that would avoid the acceptance of reasonably clever forgeries was employed. The most essential factor - reliable testimony of the vessels' provenance - was never properly investigated, as is evidenced by the very few cases where such details are recorded. It is also quite obvious to the careful reader of the passages quoted that the attitude of scholars to the inscribed bronzes was no more advanced than that of our medieval monks towards the thousands of relics pouring into Europe in the same period. Archaic bronzes were regarded with almost equal awe and apparently only from Sung times was their possession permitted to private individuals, but the mystic aroma which accompanied them held doubters in check and acted as a deterrent to scholarship of a searching and fundamental nature.

Kao has described very vividly and in great detail the methods forgers employed in aging bronzes; it is possible that his account is reliable, but we must leave the assessment of this to one versed in chemistry. There is, of course, the prob-
lem of discovering exactly what substances bore the names occurring in this passage.

During the reign of Hsuan Te (1426-36) large numbers of bronze (and brass) vessels were cast; some were made for the ancestral temple, others were used as awards to officials. Large quantities of gold, silver, copper and other metals were employed and over 3,000 vessels and more than a hundred varieties were manufactured. Copies were made of vessels illustrated in the Sung Catalogues, and the vessels were aged by various means:

"With the exception of vessels maintaining the original colour of the metal, the Hsüan vessels (i.e., of the Hsüan Te period) contained a class with an imitation of ancient patina. They were not like the forged products of Honan, Chin Ling, Ku Su and such places made by baking and burying. An old bronze founder told me that the imitation of the archaic green colours on the Hsüan bronzes was achieved by obtaining from the royal stores broken and incomplete ancient vessels. They selected those with the blue-green and jade-green colourings, and pounded them into a powder and dissolving this in quicksilver; threw it into the molten bronze and melted it together. When the vessel was completed, they next applied the colours of green patina and red cinnabar using a mixture of quicksilver and finest sand blended with the colours, dabbing this on to the vessel body and allowing it to soak in. The vessel was then roasted (and cooled) alternately over a fierce fire up to five times, and thus the green patina colour entered deeply into the interior of the metal. Then the vessel was boiled thoroughly in molten white wax, brushed with a coir palm (leaf)

A brush, rubbed with cotton cloth, then within and without the green and red colourings stood out, and even when scraped with a knife they did not break away. (Hsiang Yüan-pier, Hsian lu po lun, as quoted by Jung Keng, op. cit., p. 191).

The method of creating patina described here differs little from the formulae noted in previous quotations; the incorporation of old patina and quicksilver in molten bronze would have very little to do with the ultimate covering of the vessel - the immense heat would evaporate most of the quicksilver which, in any case, would not dissolve copper salts, and these would merely form a scum on the molten bronze. A covering of patina which apparently combines deeply with the bronze metal beneath it, and so hard in texture that it cannot easily be dislodged is, however, a feature by no means difficult to fake. Forgers, too, might achieve equally realistic results and, no doubt, worked from similar formulae which they jealously guarded. Of one thing we may be reasonably certain, spurious vessels with such a high standard of patination would easily pass the scrutiny of Sung or Ming period experts.

3. Forgery in the Ch'ing Period.

More than two centuries were to pass before our next writer

17. Or possibly the great heat would cause the salts to revert back to copper metal while the other chemical constituents would be lost as gases. The mixture described here would not have the least effect on the molten bronze or on the cast vessel.
appears and during this time the subject of Chin Shih Hsüeh seems to have lain dormant. The great calligrapher of the 18th century, Liang T'ung-shu, wrote a lengthy study of ancient bronzes which has been translated by J. C. Ferguson (Smithsonian Report, 1915). Much of his material has been drawn from the work of Chao Hsi-ku and some portions from that of Kao Lien. In fact his study is nothing but plagiarism and adds little new to the published information already available in his times. He adequately illustrates the standard of knowledge in Chin Shih Hsüeh current in the decades immediately preceding the compilation of the Imperial Ch'ing Catalogues, and shows clearly that a second stage was set for the acceptance of a large new group of forgeries which for a second time would be immortalised in print and thus add further to the already existing confusion.

Juan Yüan, the great collector of the early 19th century, published his famous catalogue in 1804, and this prepared the way for the advancement of studies of bronze inscriptions which has continued almost unabated up to the present day. He says

18. The following extract from Liang's study should be noted because of its influence on the opinions of later scholars; particularly Lo Chen-yü, in respect to the inscription types of Shang: 'As regards the inscriptions on the various bronze vessels, those of Hsia, Shang and the early part of Chou with few characters contain one or two characters; those with many have no more than twenty or thirty. Those with two or three hundred characters definitely belong to the closing years of Chou or the Ts'ìn period. There are also vessels without inscriptions which may be authentic vessels of the people of the Three Dynasties who having no meritorious deeds to record did not have inscriptions entered on their vessels. These cannot be asserted not to be ancient.' (Liang T'ung-shu, Ku t'ung ch'i k'ao, Mi shu ts'ung shu, ch'u chi, 5/3).
nothing about forgery, however, and credulously accepts all his materials as being above suspicion. From his time until the early 40's little thought was given to the subject, then the second great collector of the 19th century made his appearance, and amongst his numerous letters are recorded his opinions on the characteristics of authentic and spuriously inscribed vessels. Ch'ên Chieh-ch'i is almost unanimously regarded as the greatest expert on bronze inscriptions; in his comments on the subject we might justifiably expect to find valuable pearls of wisdom. He is, indeed, the first student of the materials to consider the inscription as a means of determining the authenticity of the inscribed vessel. In one of his letters he writes:

"Incomplete characters, imperfect literary style, imperfect calligraphy, defective syntax; how can these be regarded as antique writings? Without thorough appreciation and not properly putting his mind to it; seeing the colours and gloss and then accepting the characters as being authentic; seeing the shapes (of the characters) are near but not seek to explain them at length; with several tens or hundreds of authentic vessels preserved and several hundreds of rubbings from authentic vessels available, yet he continued to accumulate large numbers of faked characters (i.e. vessels containing spurious inscriptions) -"

19. Of the 560 inscriptions recorded in the Chi ku Catalogue comprising those in Juan Yuan's possession, a considerable number from private collections, and rubbings of vessels presumably lost at the time, Jung Keng has determined 54 to be spurious amongst which 20 were copies of inscriptions reproduced in the Sung Catalogues (op. cit., pp. 201-04).

20. The ku wen, 'antique writings', which he classes as imperfect are probably engraved spurious inscriptions in Yeh Chih-shen's collection - no catalogue was published. Ch'ên almost invariably regards cast inscriptions as genuine; those determined as forgeries are all engraved script.
such were the pitfalls of Mr. Yeh - how can we fall into them? If we should do so we would still tend largely towards a playful attitude and delight in a shallow approach to the study of archaic characters. Impoverished gentlemen are able to make rubbings to collect (copies of) archaic characters and to study them - is it possible that those with the wherewithal can approach this?

Forged engravings will have traces of chisel cutting; if these have been rubbed away by means of bronze filings, then there will also be traces of the rub marks and the sharpness of the characters will be lost, too. Old objects rubbed by hand can be recognised; forged ones will not be so transformed. In forged vessels there are no characters underneath the patina; even within the (thickness of the) patina, characters do not appear. Ancient vessels which have decayed (i.e., have been corroded), do not have the characteristics of the bronze preserved, consequently the characters cannot be cleared and seen (i.e., the patina cannot be scraped away without damaging the inscription). Genuine vessels have ash accumulated in the bronze sweat under the characters (i.e., within the grooves of the character strokes) - this certainly cannot be faked. Cast characters and engraved characters can definitely be determined - cast characters of elegance are narrow at the top and wide at the bottom (i.e., the stroke grooves are wider at their base than at the surface). The characters of the ancients have strength, those of present day men lack strength. In the penmanship of the ancients the stroke of the pen achieved its purpose, each stroke was lifted or completed (in its right place), stood firmly and went through to the foot of the character. How can modern men reach

21. i.e., Yeh Chih-shen, 1779-1863, a collector and connoisseur of antiquities in stone and bronze; father of Yeh Ming-ch'en. 'Hummel, Eminent Chinese of the Ch'ing Period, p. 904).
this (standard). That they are unaware is merely because they have not set themselves in this direction and made a thorough investigation; to appreciate antiquity it is necessary to regard the (study of) the script as most important. Those who traffic in bronzes and lack knowledge of the characters see many excavated articles and can determine what are genuine or faked; should not scholars and officials be able to differentiate them too? By studying rubbings they can determine them by the text and the characters they know (what is true or false). Where (a text) is excessively held in doubt it is not because it is of a late period (and so may be genuine) it is because its characters are not well formed (and thus is a recent forgery).

The characters and the execution of Sung and Yuan imitations (cast in Sung and Yuan times) which have been buried cannot but accord (with these facts); there are those whose colour and sheen is of greatest elegance; there are even those cast from ancient bronze. The dexterity in which the ancients made their moulds, cannot now to a great extent be conceived; the moulds were made of clay, the patterns were cut out by knife in the surface (of the mould) and the characters were written on with lacquer to which was added clay layers forming relief characters; when the casting was completed it formed intaglio script. How can this be done nowadays .......

Within and without, the moulds joined (perfectly) ... but how could they not make some small error? The bronze did not (completely) harden, (the mould sections?) were not adjusted carefully - it was not possible that there should not be a small lack (of perfection). Air remaining in the mould would cause holes during casting .... The script itself exhibits period styles, when mutually compared these can be seen. The script has also grades of execution; chronological and geographical differences. The literary style has also set patterns. When one has seen much of the varieties one can
'deduce these for himself.' (As quoted by Shang Ch'eng-tso, Ku tai yi ch'i wei tsu yen chiu, Chin ling hsueh pao, vol. 3, p. 243-44).  

The student must search far to discover in so short a space so many statements on the subject of forgery; Ch'en Chieh-ch'i has submitted some very interesting points in the determination of faked vessels, and it seems that his understanding of the inscriptions must have far surpassed that even of later scholars. He has gained the unqualified admiration of Shang Ch'eng-tso:  

'... all students of archaic texts and characters are unanimously agreed - why? Because his perception was so extremely good. For a whole lifetime he collected bronze vessels and other objects, no less than several thousand, and there was not one article amongst them that was forged ...' (op. cit., p. 243).  

His opinions are often quoted and his prestige as a connoisseur and expert has seldom been held in doubt, yet if we consider carefully the points he has made in the above extract we may begin to wonder if there might not be at least one forgery that crept into this peerless collector's hands. Let us tabulate the criteria which he considers determinative of spurious vessels:  

(a) inscriptions exhibiting incomplete characters,
imperfect literary style, imperfect calligraphy, defective syntax,

(b) traces of chisel cutting - sometimes smoothed by metal filings but still exhibiting signs of abrasion,

(c) inscriptions with character stroke grooves which do not appear sharply cut,

(d) forged bronzes polished by hand differ from authentic ones so treated,

(e) under the patina there are no characters, or even within the thickness of the patina,

(f) heavily corroded vessels will not have the characteristics of the bronze metal preserved,

(g) forged bronzes will not have ash accumulated in the bronze sweat in the character grooves,

(h) cast characters should have the stroke grooves wide at the base and narrow at the surface, if the vessel is genuine,

(i) in faked inscriptions the characters will lack strength and precision,

(j) badly formed characters will appear in spurious inscriptions.

His first criterion is one with which we are in full agreement, and which we have shown later to be characteristic of faked texts, yet amongst the bronzes in the Fu ch'ai chi-chiu lu are numerous examples of inscriptions exhibiting precisely these

23. See Section Five.

24. Compiled by Teng Shih, first published 1918 (Feng yü lou shih yin pen). In this catalogue rubbings of the inscriptions of vessels once in the collection of Ch' en Chieh-ch'i are assembled together with accompanying notes in Ch' en's handwriting.
features but not one of them has he labelled a fake! The second criterion is to be noted in earlier quotations and is of little importance, for only the poorest quality fakes exhibit so obvious a feature. Clear-cut character grooves obtain in many of the inscriptions that were once the property of this collector; this feature may be noted in both genuine and forged examples; it is by no means uncommon in forged cast script. Criterion (d) is one of questionable value. We know of no instance of the next criterion (e) which we interpret as a partial engraving of characters in thinly patinated areas, while thickly patinated areas are left untouched. It is a reasonably ingenious idea but we are of the opinion that it is purely an imaginary class of forgery of Ch'en's. Criterion (f) is a little difficult to understand. It seems that Ch'en requires a genuine heavily corroded vessel to have none of the original metal to remain at all - forgeries could not, of course, obtain this characteristic. We do not know what he means by

Patinated bronze vessels on view in various collections are, indeed, beautiful objects with their smooth and glossy surfaces of green, brown, blue, and red colourings. The polished surface is usually accounted as the result of constant rubbing of the vessel in the palms of the hand - a customary practice imparting a sheen to the patinated surface greatly admired by connoisseurs. However, it is greatly to be doubted that natural oils of the hand have contributed much to this feature. The smoothness and sheen is acquired by boiling the vessel in wax which process tends to fix the patina more firmly to the bronze surface. Later polishing is done with cloth or possibly by hand. Differences between genuine and forged vessels so treated may possibly be determinable by connoisseurs, but we suspect such differences are, for the most part, imaginary.
'bronze sweat', but it would indeed be strange if the ancient craftsmen in their final polishing of the vessel did not clean the decor and inscription stroke grooves of foreign matter that may have resulted during casting operations; in any case the original composition of ash would have altered beyond recognition during the two thousand or more years of the vessel's burial. His next criterion (h) is utter nonsense as any student may discover upon examining available vessels that were once in his collection - it is practically impossible to prepare the mould inscription so that intaglio characters with this feature will result.* Criterion (i) is merely a matter of personal taste; Ch'en wrote in a clear and well formed script but we cannot understand how he was able to see such strength and precision in the ancient calligraphy of the majority of inscriptions in his possession. Few, indeed, are the inscriptions which bear any resemblance to his description of the standard of script that he considered to obtain in pre-Ts' in times. The last criterion noted above is one we believe to be significant in determining fakes, but again we find cause to doubt the reliability of Ch'en's observation - most of the long inscriptions and many of the shorter ones in the Fu-chai Catalogue contain very badly formed characters, yet he does not regard them as fakes.

Ch'en has written extensively on this subject but owing to
Although a little ambiguous out of context - it might appear to be descriptive of character shape - 'above' refers not to the upper section of the characters, but to the upper surface of the bronze metal in which they are engraved; 'below' refers to the bottom of each character stroke groove. One familiar with the archaic script will sense immediately Ch'en's meaning; the context, too, shows clearly what he is expressing - he is contrasting groove appearance of cast and engraved inscriptions.
the lack of a copy of his collected letters in Australasia we are able to discuss only sections of those quoted in secondary works; the long extract just studied manifests his essentially shallow knowledge of the subject of forgery, although it is written in a very convincing manner. In another letter he states:

"Formerly forgeries were produced with cast inscriptions; in recent years, in Shensi, the engraving of spurious texts on ancient vessels lacking inscriptions first commenced. In Chinan (Shantung) those of Ku Hsiang-chou are not uncommon. At present in the capital a new sort of forgery has arisen - tracings of characters are made from rubbings; curves and bends (of strokes) are distorted, each (character) suffers from omissions (of strokes). Ancient inscribed vessels each exhibit some differences (in character structures), forgeries do not manifest this feature, the aim is to create unusual characters and they necessarily result in great errors. Only the student of bronze inscriptions can detect them, those who have not studied the materials are unable to recognise them." (as quoted by Jung Keng, op. cit., p. 213).

This passage is most important for it illustrates Ch'en's basis of study - he has accepted as authentic articles all inscribed vessels which he and his predecessors have customarily regarded as being genuine. Inconstancy of character structures is

26. Fu ch'ai ch'ü, quoted by Jung and Shang without bibliographical details of the publication.
accepted as a normal characteristic of genuine vessels; variations in the prose style, terminology and general expression are all features which must obtain in genuine inscriptions. Perhaps this is reading a little more in the original writing of Ch'en's than is fully justified, but the interpretation of his statement that 'ancient vessels individually exhibit differences; forgeries lack this' must be made with reference to the vessels in his collection, and to the reproductions in catalogues published before his time, for it is upon the basis of these that his comments are made. He describes thus accurately the features of the archaic script as he understood it; he was not in a position to determine the genuineness of the materials studied because systematic methods of research were unknown to him and to his contemporaries, and moreover, there had been no attempt to undertake scientific excavations of ancient Shang or Chou period sites to recover inscribed objects whose authenticity would be beyond suspicion. Lacking properly authenticated inscriptions and not attempting to assess the reliability of provenance details of the few with vague testimony of their dis-

27. Another statement of Chen's (quoted by Shang Ch'eng-tso, op. cit., p. 270) illustrates his meaning more clearly: 'In the inscriptions on archaic vessels each line of characters has its own peculiar disposition (氣) and each character has its individual demeanour (氣). This is essentially a description of the feature termed 'inconstancy' in the next Section; Ch'en is referring not only to its occurrence in individual inscriptions but also to inconstant structures throughout numbers of inscriptions. Inconstancy is absent in most of the engraved inscriptions which he classes, quite correctly, as forgeries. He was first to recognise this practice of forgery.
covery, following the attitude and approach of one who is a collector as well as a scholar and adopting, without critical evaluation, research methods established in the formative period of the study - these were the pitfalls of Ch'en and of his predecessors. They were precisely the short-comings that must be expected and allowed for in the writings of earlier scholars; as we have already observed, no previous scholar has attempted to assess the quality of the scholarship of these pioneers as a first step towards clearing up the confusion that has resulted from their often misdirected labours. It is easy for a Westerner trained in modern research techniques to disparage the toil of his less enlightened predecessors; although our criticism in its frankness tends to be harsh, we record here the great debt that any present or future student must owe to the efforts of these scholars. Without the assistance that may be gained from their compilations of inscription reproductions and the immense knowledge of the classics that they have brought to bear on the problems of interpretation and chronology in their commentaries, studies in this field would be beset with enormous difficulties.

The two types of forgery described by Ch'en in this passage exhibit a further progress in awareness of the nature of forgers' methods; the first is not commonly found and is not usually difficult to detect - we have seen, in the various collections in Japan, only one example of a spurious text recently
engraved in what is almost certainly a genuine Chou period article. It is a sword in the Fujii Collection, Kyōto, which has even passed the scrutiny of Umehara Sueji, although the context of the inscription is obviously one that must cause the student to suspect it on this basis alone. A close examination of the inscription area shows immediately to the careful observer that the inscription is engraved into the patina. The second method of forgery is apparently still descriptive of those engraved (not cast) in genuine vessels. In recent cast forgeries, examples of this method of tracing from prototypes may, with luck, be discovered; ins. Z1.2 studied in some detail later is an especially good illustration of the feature.

Chang Chih-tung was the first scholar to dispute the authenticity of accepted 'genuine' inscribed bronzes; his writings include studies of four well known inscriptions two of which are quoted by Jung Keng (op. cit., p. 213-215), namely the Nao Kung Ting and the Ta Yu Ting. Reference is made to his examination of the former inscription in Section Three, thus the relevant passages need not be quoted here. Chang noted the correspondence of sentences and phrases in the inscriptions with prototypes in the Shu and the Shih and remarked upon the lackadaisical manner in which they were arranged. Although in some details his comments are incorrect, his observations are of particular importance.
4. Recent Studies of Forgery.

Since the establishment of the Republic there have been several attempts to study the question of forgeries; other than isolated statements and opinions, we shall now proceed to examine the results of several scholars' researches, all of which have been published during the last twenty or thirty years. Our collection of this material is unfortunately not quite complete; we have not, for instance, seen a copy of Ts'in Keng-nien's work referred to, but not quoted, by Jung Keng (op. cit., p. 215). This recent scholar has determined 19 vessels to be faked including the Nieh Ling Yi and the Shen Tsu Kuei; other than these facts we have no information about his research; we are also of the opinion that both these texts are fakes.28

Jung Keng describes four types of forgeries that have been current in the Republic period:

(a) inscriptions added to genuine vessels,

28. There are, no doubt, other articles on forgery, unavailable to us, which may have been published since Jung Keng wrote his *Shang chou yi ch'i t'ung k'ao*, but it would seem from the numbers we have collected that those omitted from this survey should not amount to more than two or three; Jung seems to have assembled all the information available to him. What we have added is for the most part extra passages from the same sources and some recent material in the present section.
(b) both the inscription and the vessel faked,

(c) a genuine inscribed fragment of bronze inserted into another vessel,

(d) a genuine inscribed fragment inserted into a faked vessel.

No doubt these are all possible methods of forgery, particularly the second one. Jung has also examined the bronze inscriptions recorded in the Imperial Catalogues and has compiled some very useful tables of these in his study (Y.J.C.S., 5/811-76). His investigation is based upon six criteria that he has evolved:

(a) all vessels with inscriptions identical to those recorded in Sung period publications with the exception of the usual 'clansign' type of the Shang period, and occasional authentic vessels - all the others which have texts of a number of characters are faked,

(b) all bronze texts that contain inscriptions copied, but changed in some respect, from the Sung Catalogue texts such as the which appears as: 公乍文障, 公乍文, etc., are all faked,

(c) all inscriptions from the Sung Catalogues that appear in vessels of a different kind from the original are faked,

(d) in all cases where the mode of expression is not in agreement with the content and order and character structures of archaic vessel texts such as a lack of text before the characters or where characters are odd in appearance; these are forgeries;

(e) all vessel shapes and structures which do not
accord with ancient types, or are odd in appearance are forgeries,

(f) those which contain only the common phrases: 乍賢尋乍賢陣等, etc., are for the most part, faked.

As a result of this investigation, Jung came to the conclusion that of the 1,176 vessels in the Imperial Catalogues there were 657 genuine ones, 190 suspected, and 329 forgeries. His criteria are of a more advanced kind than those of many of the earlier studies we have quoted, particularly his preoccupation with copies that have been made on the basis of the Sung Catalogues. What is most commendable is the fact that he has not just sat idly and written down the first thoughts that came into his mind, but has listed his materials and given good references and classified each inscription according to its number of characters, vessel-type, and his opinion as to whether it is genuine, suspected or faked. It is certainly rare to find so high a degree of scholarship in the studies of the inscriptions themselves.

Although Jung's survey is good, we must consider for a moment the validity and value of his criteria. In the first place he has acted upon the assumption that the Sung Catalogue inscriptions are mainly authentic but this does not destroy the value of his first principle; even though it is to be suspected that a large percentage of them are forged, the fact that later forgers have copied from so many shows clearly the importance
Mention should be made here of Wang Kuo-wei's *Sung tai chin wen chu lu piao* and his *Kuo ch'iao chin wen chu lu piao* (later revised by Pao Ting), both works of value but they lack precise references. It is not clear always upon what basis Wang's determination of forgery rests; as far as we have noted, he recognises mainly the later faked copying of pre-existing texts - particularly of those in the Sung Catalogues. Jung and Shang Ch'eng-tso (mentioned later) seem to have incorporated all the vessels Wang regards as spurious in their writings.
of the Sung Catalogue texts in the determination of faked inscriptions. It is, of course, possible that some of the original Sung period vessels may have been preserved in the Imperial Collection, but we tend to agree with Jung that barely one percent, if any, still remain. When a complete study has been made of the Sung Catalogue inscriptions and the authenticity of them has been properly assessed, a far larger number of fakes will be found in the Imperial Catalogues (as well as in later catalogues) than the mere 329 discovered by Jung.

His second criterion is quite valid but it must be carefully used; it is not entirely justifiable, for instance, to consider the texts reading 周公 作鼎, or 白作文王 陵鼎, as copies of the Sung Catalogue text quoted previously - Jung does this (Shang chou yi ch'i t'ung k'ao, p. 198), and though we agree that both these are fakes and may possibly be copies of the Sung Catalogue texts, there is really no definite proof of the latter. His third point, too, is quite valid. His fourth and sixth criteria are essentially the same thing, but his fifth criterion is not really acceptable as it is now known that unusual types are in fact being excavated under conditions which preclude any possibility of forgery.

In another section of his large study of bronzes, Jung Keng suggests four further criteria to determine the authenticity of bronzes:
(a) vessel shapes and constructions that are not ancient are faked,

(b) vessel types such as 犀象, 象尊, 雉尊, 天尊, 鬲尊, are forgeries,

(c) decorative patterns which are not ancient are faked,

(d) Shang and Chou style vessels inlaid with gold and silver are faked.

These are directed against the bronzes in the Imperial Catalogues, with the exception of the last point which is a debatable matter in the light of recent discoveries, Jung's first three criteria above are merely subjective statements that mean nothing. Until more fully attested materials are excavated, we shall not be able to assert what is, or is not, 'ancient'.

Shang Ch'eng-tso has written perhaps the most comprehensive survey that has attempted to deal solely with the subject of forged inscriptions, and like Jung, takes cognisance of the possibility of using the inscription text itself as a means of determining forgeries. He has based his study on five main criteria:

(a) character structures influenced by the Sung Catalogue texts,

(b) texts made up of selections of phrases and sentences from various inscriptions,

(c) texts copied from others but lacking words and phrases,

(d) texts copied from others on to larger or
smaller vessels with the text area enlarged or reduced in order to fit the inscription area,

(e) perfect or nearly perfect copies of existing (genuine) texts.

Each of these criteria are quite easily understood and shall not be elaborated in detail here. Shang's survey is most interesting to read and because of its adequate illustration of the materials discussed, it may be ranked amongst the best published studies made to date. It is, however, of limited value as the majority of the inscriptions treated are texts engraved on textless vessels - cast inscriptions are left well alone.

Shang's article has been used as the basis of another similar survey by Hsü Chung-shu who has incorporated some further material not noted in previous quotations. We quote from his article at some length:

'At that time (the Sung period) the passion for antiques had not yet developed into a craze, the market prices of antiques were in all probability not high either; there was no cause for making forgeries and moreover there had not been discovered many original bronzes (upon which to base them). Thus it was, and in the Po ku t'u and the Catalogue of Hsüeh Shang-kung there remain (copies of) only a few forged antiques listed. Not only was the skill of forgers at that time not yet of a high standard but also they could only fraudulently copy existing vessels and naturally the deception
As far as the discovery and forgery of bronze vessels during the Yuan and Ming dynasties is concerned, although there is nothing recorded (!), I think however that the appearance of such articles could not have been rare; probably the greater part of the collections in the Ch'ing Palace must have been the remnants surviving the ravages that occurred during these two dynasties (i.e. Yuan and Ming). The several catalogues published in the Ch'ien Lung period - the Hsi ch'ing ku chien and Hsü chien and the Ming shou chien ku - are just a general accounting since the time of the Po ku t'ı'ı and Hsüeh's writings. During this period of six or seven centuries, the prices of antiques rose higher and higher, and because there developed a certain class of the art of forgery during the formative period of imitation castings (initiated by) the Imperial Household during the Sung and Ming dynasties, there is consequently in these several catalogues quite a number of skilfully made forgeries. Even though these forged articles are cast, no matter how well, when compared with those of ancient times they never quite approach

Our earlier quotations prove nearly every statement here to be incorrect: the passion for antiques was strong enough to be classed as a craze; high prices are recorded in Sung times (Jung Keng, op. cit., p. 161); there was every reason and opportunity for forgery to be practised; archaic style vessels were called in from all over the country to serve as a basis of study for the imitations required by Imperial command; the number of forgeries in the early Sung Catalogues is much higher than generally supposed, and from what we know of the circumstances of the time, it would be most unlikely that genuine inscribed vessels were many; that more than 600 inscribed vessels were accepted as genuine is a tribute to the skill of forgers of the time; certainly some forgeries were copies of existing vessels but the careful observer will note a high element of ingenuity in the composition and calligraphy of the Sung Catalogue texts.

Wang Kuo-wei was able to find less than a score of fakes in the Sung Catalogues, and as a result of his efforts no one has felt it necessary to reconsider further the authenticity of these inscriptions.
them in appearance. Thus although the 'hand-copies' in these catalogues are not well-executed, the forgeries can nevertheless be very easily recognised ....'

Hsü then proceeds to note the growing interest in the collection of inscribed bronzes for historical research, particularly since Juan Yüan's publication of his famous catalogue. With such further demands for inscribed materials and consequent rising of prices, forgeries tended more towards inscribed rather than textless bronzes. It was a general practice to add inscriptions to authentic bronzes as forgers found it too difficult to cast both the vessel and the text together. In this period there was only one person who was capable of distinguishing such forgeries - Ch'en Chieh-ch'i. Hsü proceeds to enumerate his criteria and considers that 80-90% are still acceptable. After this he refers to Shang Ch'eng-tso's article which we have just discussed, enumerates the criteria which he established and then adds four further criteria of his own:

(a) When the publication dates of catalogues of bronzes (i.e., the period between publications of two different catalogues) are far removed from each other, the later appearing publications will have forgeries in greater numbers.

(b) Vessels that have no connection between individuals, time or locality (as shown in the contents of their texts) but yet possess the same general features, these with the exception of one or two, or of those that can be shown to be the originals (i.e., the
others have been copied from them), can for the most part be regarded as faked.

(c) In the cases of all inscribed vessels each class of vessel has a particular place for the inscription; those that do not accord with this are probably forgeries.

(d) The vessel text, the vessel's shape and structure, and the decor; these three items in each period should have different characteristics. As regards these three items, chronological differences must be in accord; that is, early vessels must have all of the three items characteristically early, late vessels must have all of them late; when early and late characteristics are confused in the same vessel - if both the vessel and its text cannot be classed as a fake - then the text is definitely forged. (Lun ku t'ung ch'i chih chien pieh, k'ao ku she k'an, 4. p. 229 ff.).

In the next issue of the same journal (p. 306) in which the above article was published Shang Ch'eng-tso presents a short criticism of Hsü's article and illustrates a number of errors he had made and also criticises severely the additional criteria noted above. Shang, in his closing lines, remarks to the effect that the determination of forgeries upon the basis of the inscription texts requires constant contact with the vessels themselves and with original rubbings - probably a dig a Hsü, but nevertheless it is quite a correct observation.

Although we agree with Shang's criticism of Hsü's article in certain details (not incorporated in our quotations), we do not, however, discount his four additional criteria entirely.
Each of them has more than an element of truth and we consider that they are basically sound. Forgeries will appear in later catalogues in greater numbers, and actually many examples can be found. In a number of cases the original inscription was first published as a 'hand-copy' in one of the Sung or early Ch'ing catalogues and the original vessel has long since disappeared. This is not so much a criterion as a line of approach that must be kept in mind in studies in this field.

Hsü's second criterion is in some respects identical to those advanced by Shang; it suggests that forgeries have been made on the basis of existing vessels and texts, and a general continuity is maintained in all but proper names. We fully agree that such types of forgeries were commonly made, and suspect they exist in great numbers in the large repositories.

Hsü's third criterion brings to mind Shih Chang-yü's recently published survey of inscription locations in various vessel types (Talu tsa chih, 8/5, 6, 7). When more fully attested inscribed bronzes are unearthed, a study along this line will possibly lead to the discovery of further forgeries not determinable upon the basis of other criteria. As to his last criterion, Hsü is certainly correct but the application of this principle cannot be properly made until there are more fully attested materials to act as controls.
These then are the main studies done by Chinese scholars on this question; Westerners have hardly given thought to it but have accepted uncritically, except in cases of trivial importance, the research and opinions of their Chinese colleagues. The few scholars who have made studies of the bronzes have not considered more than a few aspects of the subject of forgery, and have made little attempt to examine the problems from the point of view of the inscriptions. Like their Chinese colleagues, they are more concerned with developing their ability to determine fakes upon the physical characteristics of the vessels. Other than the characteristics of shapes and decor of the vessels, they occupy much of their time on observations of the patina; A. J. Koop's remarks following are illustrative of this:

'... forgery was rife from a very early period, and there was nothing to prevent the ingenious and skilful faker from collecting small and unimportant bronzes, or broken fragments of larger ones, to melt down for his dishonest purposes.'

We are thus thrown back on a study of patination.

30. One might suppose that the forger would find it a better financial proposition to dispose of such fragments or small vessels without destroying them; it requires little ingenuity to produce bronze and the smelting down of ancient bronze fragments will not make the resulting vessel appear any more ancient. Only Ch'en Chieh-ch'i speaks of this practice and cautiously dates it in Sung or Yüan times; he does not, of course, tell us how he was able to determine that the bronze metal of such fraudulently cast vessels was originally taken from genuine ones!
as a criterion of the age of a bronze. All extant examples other than those of quite recent times have been rescued from age-long burial in the earth. This burial produces on the surface of the metal a chemical change, the appearance and colouration of which depends partly on the composition of the alloy itself, partly on the nature of the soil in which it has been lying or of the extraneous materials with which it has been in prolonged contact. Broadly speaking, it may be said that the greater the proportion of copper, the more extensive is likely to be the oxidation and decomposition of the bronze containing it. The tin, and also, if they be present in the alloy, the silver and the gold, contribute practically nothing to the patination.

It is possible, so certain scientists assure us, to ascertain by a careful analysis of its patina the minimum length of time during which a bronze must have been buried to produce on its surface the incrustations of malachite (green carbonate of copper), azurite (blue), and atacamite (apple-green, containing chlorine) or the glossy mirror-like patination, ranging in colour from silvery grey to deep black, due to the presence of mercury. But even thus any accurate dating, even to within a thousand years is quite impracticable.

At the same time, there is no difficulty in distinguishing the aerugo genuinely caused by burial in the soil for ten, fifteen, twenty or more centuries, from the fraudulent imitations of modern forgers. The true patina actually eats into the surface of the metal, and looks as if it had fastened its roots there and become an inseparable part of the object; whereas the imitations, if produced by acids, are merely skin-deep, or if done in coloured wax or lacquer (often artfully mixed with minute chips of real malachite), are merely superimposed on the metal and can be removed bodily by boiling, scraping or tapping with a light hammer, so as to leave the surface of the alloy practically in its raw state. (It should, however, be observed that even a genuinely old
'patina, will sometimes appear to give way to scraping and tapping, but never entirely."
(Early Chinese Bronzes, Chapter II, p. 3-4).

W. van Heusden, a collector of many years' experience, has made similar comments on the importance of the patina:

'See as many collections as you can, study the illustrated catalogues of these collections again and again! Only thus can we learn to know bronzes.

The large majority of imitations are so poor that they could only deceive a novice. Others are not so obvious and then the best test is the patina. A genuine patina cannot be easily separated from the bronze it grew from. Imitation patina can generally be removed by washing with soapy water, gasoline, turpentine, xylol or acetone.' (Ancient Chinese Bronzes, p. 64).

The reader might well wonder if an artificial patina which has adhered firmly to the bronze surface or even 'fastened its roots there' would be recognised as such by those who rely on such a criterion in determining the authenticity of the vessels. That so firm and genuine-seeming a patination can be produced artificially is not to be doubted; that it can be distinguished from patination thought to be genuine is, however, a debatable question. The nature and extent of the study of patination by Chinese or by Western scholars is faithfully portrayed in the two quotations above - only in the cases of a few bronze fragments of Anyang provenance has scientific analysis been attempted, the results are of no value in the determination of forgery - because no similar investigation has been made of the patination
It is pleasing to discover, as a layman in these matters, that one of the few scientists who has investigated the problems of patina has also recorded similar views; Dr. H. J. Plenderleith has written: 'In the present imperfect state of our knowledge one must beware of reading too much into purely qualitative evidence and it may well be the case that the answer to what may appear to be the simplest archaeological question is as yet beyond us. For example, there is no trustworthy scientific test which will distinguish whether a bronze is Shang or Sung, whether it is 3,000 or only 1,000 years old. It is highly desirable that some scientific criterion should be found as this is perhaps the most urgent question left outstanding. What is wanted is a systematic study of as many well-authenticated specimens as possible. This is obviously a long term research requiring special equipment and access to representative bronzes of all classes; it would seem to require the accumulation of a large body of analytical data of various kinds. We need to accumulate the results of as many spectrographic examinations as possible; we need also quantitative chemical analyses before we can bring out individual characteristics which I am persuaded must exist; and as fragments suitable for chemical examination are hard to come by, the more who interest themselves in furthering this particular study the sooner may we expect results to be forthcoming which will be of value to us all.' (p. 54).

Our reference on p. 56 to Professor H. C. G. Carpenter's scientific analyses of Anyang fragments as the only investigation of this kind was made before Plenderleith's article came to our notice; work in this field is apparently somewhat extensive (c.f. his first annotation, p. 33) but it is not possible to pursue enquiries further at the moment. Taking into account the detailed descriptions of minute characteristics in the patina and the writer's opinion as to whether they could be duplicated artificially, it would seem that our statement of the ease with which forgers may manufacture natural appearing patina should be modified. However, the statement is not made from the point of view of scientific analysis of patina - the vast majority of inscribed bronzes have only been examined superficially. Those with faked patina described by Plenderleith represent the most obvious examples covered with wax or lacquer based patina; 'alchemic' patination has apparently not been investigated. As to faked inscriptions, only those engraved in the bronze seem to have been examined.

With properly attested materials appearing from widely scattered sites accompanied by full accounts of the location of the excavated articles, it is to be hoped that some enterprising Chinese scientist will continue this type of investigation incorporating the highly important additional information of physical features of the sites - soil content, climate, etc. Such an investigation accompanied by the more limited approach possible in cases of unattested vessels may, indeed, have very valuable results.
or of the nature of the bronze alloys of the general corpus of bronzes. The application of science to our problem might possibly determine more easily for us the extent of forgery in available materials.\textsuperscript{31}

Henri Maspero, in a review of Takata's \textit{Kochūhen} (Journal Asiatique 1927), made some extremely severe judgements on the authenticity of the inscriptions generally; Professor Karlgren has noted his main arguments and discusses their validity in his \textit{Yin and Chou in Chinese Bronzes}. Maspero's objections were:

(a) whenever a bronze has a date which accords with the san t'ung li system of Liu Hsin's we must suspect it of being a forgery of later ages, the date being the result of a backward calculation;

(b) there are numerous cases in which the same inscription occurs on several or even a whole series of vessels;

(c) the occurrence of parallel phrases and sentences with those of the Shih and the Shu,

(d) the inscription accounts of the investiture ceremony do not accord with that described in the Li chi and the Chou li.\textsuperscript{32}

\textsuperscript{31} An extensive chemico-analytical survey of the patination and of the nature of the bronze alloy of vessels in existence and easily available compared with a similar survey of scientifically excavated materials would be a control of considerable value. It would, of course, require the wholehearted co-operation of collectors, but here we would expect such a scheme to break down, for although only a few filings of metal and patina would be taken from individual vessels, it would be too much to expect their owners to assist in a survey that might result in the discovery of their treasures being fakes.\textsuperscript{*}

\textsuperscript{32} We have not had access to the original article but simply
Karlgren counters each of these objections with his usual convincing arguments then proceeds to present his own reasons for accepting the authenticity of the inscriptions:

'From studying the bronze inscriptions I have become more and more convinced that the main bulk of them, such as given in the repertories of the best and most experienced Chinese collectors, is on the whole quite reliable.' (p. 14).

Karlgren then discusses several characteristics which he considers speak strongly in favour of the reliability of the bronze texts. These we shall note and examine in detail:

1. the lack of parallel allusions in the bronze texts to historical persons or events in the traditional texts.

In his discussion on this point he says:

'... it is remarkable how comparatively seldom persons and events known from early literature occur in the inscriptions. If any considerable number of bronzes of the standard repertories had been forged in later times, we should have expected to find a great many allusions to famous persons and well known happenings, such as are recorded in Si-ma Ts'ien and in Ch'un-ts'iu, Tso-Chuan, Kuo-yi, Chan Kuo-ts'e. There are...

32. record here the points discussed by Karlgren. Criteria (b) and (c) are actually of immense importance; in particular (c) is one which has never been carefully examined. The extent to which traditional texts have been consulted in preparing the inscription texts of forgeries will be assessed by us in a later study of the Sung ( 鼎 ) vessels of which the first of the series 'discovered' was reproduced in the Imperial Catalogues and also by Juan Yuan. Since then, ten or more vessels containing the same text have come to light and appear in various catalogues.
A somewhat similar sentiment is expressed in Otto Kurz's *Fakes* - he says: 'The forgers, knowing the weakness of their compatriots, concentrated on inscriptions with historical associations and more or less neglected the artistic aspect of their products.' (p. 200). If this writer had been in a position to know the contents of the inscriptions - whether genuine or forged - he would be immediately aware that the statement cannot be substantiated except in a very few cases. This, as far as the inscription is concerned; as to 'the neglect of the artistic aspects of their products' and in connection with a comparatively careful consideration of the inscription, it would seem to us that even in generally accepted forgeries the inscription has taken second place in the production of the fake.
very few such indeed. When really spurious allusions of that kind do occur, they are generally so naively worded that the fraud is easily seen and has been detected long ago by the Chinese critics.' (p. 15)

We find it exceedingly difficult to understand how such an argument can possibly support the authenticity of the inscription when the particular point discussed is indeed the characteristic to be expected in a spurious text. Obviously a forger in compiling the text of an inscription would seek to present it with the greatest possible aroma of authenticity, but would he be so foolish as to incorporate already known historical facts in his text and expect collectors and scholars to accept the resulting inscription as a genuine article? Hardly. During the period of eight centuries of the Chou dynasty, thousands of inscribed vessels must have been cast - the chances of discovering those made by the relatively few historical personages recorded over this period in the traditional texts would be very small indeed. Forgers realized this and, in most cases, used events and names not directly recorded in the traditional texts but which had some sort of connection with these. In this way they worked on a safer basis; constant reference to known facts would excite the suspicion of Chinese antiquarians and would bring suspicion on all bronzes bearing inscriptions containing such material.

The Ts'ing Hou P'an is a particularly good example of such a blatant forgery. It is filled with Chou time lore and abounds in expressions and phraseology that have every appearance of having been copied unblushingly from various traditional sources. Allusions to various aspects of early Chou history can be found.
It is interesting to note that Chinese critics tend to classify as forgeries, inscriptions which could obviously have been copied from pre-existing sources; it is seldom that they attack inscriptions which have no direct relationship with earlier 'discovered' inscriptions or with the traditional texts. Because of this general limit in their investigations they have found the determination of 'authentic' inscriptions an easy task for there are comparatively few that may be suspected with reference to this criterion of such doubtful value.

33. within it. To our knowledge, no Chinese scholar has accepted it as a genuine text and only one publication has incorporated a rubbing of the text. The character shapes are among the worst formed of any inscription - a single glance at the script is sufficient to decide without any qualification that it cannot be anything but a fake. It is not the only inscription that betrays its fraudulence so easily but because it is so easy to determine such vessel texts as this to be spurious it is not correct to imagine that it reflects the maximum standard we must expect in the case of all faked texts.

34. If one studies the numerous works on Chinese bronzes and has the opportunity of discussing various aspects of such studies with Chinese or Japanese scholars one is soon aware of a very pronounced attitude of mind towards the bronze texts as historical material. There is no greater pleasure to these scholars than that of discovering some minute 'parallel' between the inscriptions and the traditional texts - the more they can illustrate their knowledge of the latter material, the more scholarly is their work considered. As far as familiarity with the bronze texts is concerned, it is a different matter; no scholar has as yet made a complete survey of the large catalogues of rubbings as a basis of historical research; on the contrary, only inscriptions that have some relationship to traditional history have been selected. Numbers of inscriptions of minor importance have been discarded partly because they have been felt to be forgeries and mainly because they do not offer much scope for academic discussion. What the Chinese scholar is most interested in is the type of inscription that can be used as a basis of academic erudition wherein he can display his vast knowledge of the traditional texts. If the parallels are too obvious,
The detection of forgeries is a far more involved task than either Karlsgren, or the Chinese critics he has followed, realize. If it were so easy a matter to detect forgeries, it would hardly be likely that forgers would find it profitable to ply their trade. Unless the bronzes they cast and inscribed were of a high enough standard to pass the scrutiny of experienced collectors and scholars, it would not be worth the trouble and expense of manufacturing them. Karlsgren seems to consider the standard of forgery somewhat low in his above acceptance of this extremely questionable criterion. Surely forgers have shown their skill not only in the casting and aging of vessels, but also in the appropriate compilation of texts for the vessels. A study of the bronze texts will show:

(a) a relatively large number of Western Chou inscriptions which have, at the most, only vague references to recorded persons and events in the very sparse literature of this period,

(b) in Eastern Chou inscriptions the same characteristic holds but the amount of detailed

34. e.g., the Tsin Hou P'an mentioned earlier, their suspicion of the text concerned is immediately aroused.

35. Kuo Mo-jo says, for instance: '.... each character and each phrase in the inscriptions on bronze vessels, with the exception of the forged ones which can be easily distinguished, are the original expressions of a few ancient people.....' (Introduction translated in English by J. C. Ferguson. Liang chou chin wen tz'u ta hsi k'iao shih, vol. 3, p. 1 at back of volume.)
information transmitted from this period is many times that of Western Chou. It would be expected that a greater parallelism would be found between Eastern Chou inscriptions and the traditional sources of this period — coincidence of facts would not be so remarkable. If the traditional texts of Eastern Chou are genuine then it seems unusual that no more than a few bronze inscriptions have been found, out of several hundreds, which have a direct though debatable, connection with recorded happenings of this period.36.

It is quite obvious that Chinese forgers have persistently avoided direct references to traditional sources because they fully appreciated the attitude of their countrymen to such blatant methods.

2. Karlgren follows with an observation on the characteristics of dates recorded in Western and Eastern Chou texts and notes the common occurrence of 初吉丁亥 in Eastern Chou texts:

'Here we wish only to point out that recent forgers could not have co-operated so systematically and with such expert knowledge as to have succeeded in maintaining such a difference.' (p. 15).

Karlgren again seems to under-rate the capability of forgers and

36. We refer here to events rather than to personages. Personal names in the bronze texts can often be paralleled with names in the traditional texts by the dubious 'loan character' theory; that these are true parallels is usually a matter of doubt. Fully attested inscriptions and other documents recently unearthed contain no definite cases of 'loan character' usage; this point will be considered at length in Section Six. It is our opinion that such a system of expression was not current in pre-Ts'in times, but is a method of interpretation forced on the ancient texts by later scholars.
does not take into consideration the fact that since Sung times there have been at least six catalogues of inscriptions which have acted as 'handbooks' for forgers. With the examples in the Sung Catalogues it was by no means a difficult task to follow a general line of compilation of text for inscriptions. In our opinion very little 'expert knowledge' was essential to achieve a degree of continuity in text types; systematic cooperation would unwittingly be effected by constant reference to the text types in the Sung Catalogues and as later catalogues were published including such forgeries, together with others with slight variations, as well as entirely new creations, these also became established as genuine articles and formed further bases for further forgeries.

In his discussion of the significance of the greater number of occurrences of the above date combination in the Eastern Chou texts, Karlgren says:

'Now it is obvious that the bronzes were not always cast in the first quarter of the month, nor regularly on the rare days ting-hai: we have here a conventionalized phrase without any real connection with the actual date of the casting. This is no unknown phenomenon in China. On Han time mirrors the day is preferably given as ping-wu even in months which we know for certain contained no ping-wu day .... There was a special symbolic reason for this and something similar must have been the case with the phrase ch'u ki ting-hai on the feudal bronzes. Since it is inconceivable that the feudal kingdoms could have such an advanced
'custom of conventionalized dating at the same time as the Royal Chou had an original free dating system, we must conclude that we are here confronted with a difference in period ....' (p. 25).

If the bronze inscriptions concerned are all genuine then it may be legitimate to draw such conclusions, but because Karlgren has found 6 Western Chou inscriptions with the ch'ü-chi-ting-hai date out of a selection of 210 inscribed vessels (of which about 90 contain dates and 41 have the first quarter of the month in the date combination) as contrasted with 56 dated vessels of Eastern Chou of which all but one contain the first quarter and 26 contain the ch'ü-chi-ting-hai combination, this is not necessarily to be regarded as a particularly remarkable phenomenon. Especially as there are 14 examples of this date combination amongst 70 bronzes with the date in the first quarter of our collection (not selection!) of some 720 Western Chou bronzes; and in Eastern Chou texts, it should be noted, that there are at least a hundred texts containing no date at all, and 30 or more with other date forms. The preponderance of first quarter dates in bronzes of both periods is possibly due to two major reasons: (a) the archaic characters ch'ü chi are particularly easy to write and (b) the prototypes available to later forgers contain a large proportion of first quarter dates. In the Sung Catalogues the first quarter occurs in 12 inscriptions, 8 of which are classifiable
as Western Chou texts; the day-date, ting-hai, is combined with three of these and with 3 Eastern Chou texts. The second and third quarters appear in only 6 Western Chou texts while the fourth quarter is found in only one text - an Eastern Chou inscription. Later forgers have undoubtedly been influenced by similar observations which they were quite capable of making for themselves. Karlgren's conclusion that forgers could not have 'succeeded in maintaining such a difference' is hardly a justifiable one.

3. Style and decoration of vessels in relation to their texts:

'if we classify the bronzes into chronological groups exclusively according to their inscriptions and thus obtain a series of distinctive groups; and if it then turns out that clear distinctions in type and decoration correspond to these distinctions then the inscriptions, on the whole, (there will always be isolated exceptions) are not forged, they are authentic. For it is inconceivable that a number of recent forgers, working independently and on isolated specimens could have had the expert knowledge of details and decorations and inscriptions that would have enabled them unerringly to put the proper inscription on the proper kind of vase. They would necessarily have given themselves away; for this typological analysis has not yet been made in China.' (p. 15).

37. The month-quarter terminology is discussed in further detail in Appendix A.
Recently excavated bronze inscriptions present an interesting sidelight on these remarks: ins. 54.1 compiled in the reign of the Western Chou monarch, King Mu, contains the ch'u-chi-ting-hai combination; the Ts'ai bronzes and other attested Eastern Chou bronzes with date formulations definitely show no propensity towards employing this combination as a conventionalised date phrase. The formulations employed are in many respects quite different from what one would expect on the basis of a knowledge of the unattested Eastern Chou inscriptions.
In this quotation is the principle underlying Karlgren's recent works on bronze types and decor. The chronological groupings of vessels was made in accordance with the contents of their inscriptions; the physical aspects of the vessels were then classified in detail and general tendencies in each group were noted. The principle involved in this study was quite a simple one, but had never before been attempted on such a detailed scale by any Chinese scholar. Kuo Mo-jo, for instance, had earlier made a practice of comparing vessel-types and decor on the basis of his chronological grouping of the inscriptions but limited his investigations to only a few cases. If the materials were all genuine the results would have been highly interesting, but neither Kuo nor Karlgren made a careful study of the most important basis of this research - the authenticity of the inscriptions themselves. Karlgren relied on the opinions of older and contemporary Chinese scholars and collectors, but did not check the reliability of them for himself. It is here that the whole fabric of his theory may be found to rest on slender foundations.

If the materials on which his chronological arrangement is based are authentic, then there is little need to question his results; if, on the other hand, a relatively large number of inscriptions are found to be fakes (if cast with the vessels then these, too, are forgeries), we can then be pretty certain that
the forgers of the vessel and text were by no means the simple-minded artisans that we have been led to believe. Again, if the inscriptions, arranged in a chronological order, result in distinct groups of vessel types each with its own characteristic shape and decor, is this sufficient proof that the materials employed in such a survey are for the most part genuine because such distinctive grouping results?

'if we find that to the chronological categories just established by means of the inscriptions there correspond fairly clear and exact typological categories, so that the distinctions in time which the inscriptions indicate convey also distinctions in type and decoration, then we shall have decisive proof of the general authenticity of both the inscriptions and the vessels .... This .... cannot be due to chance nor to any systematic effort on the part of forgers who have worked for generations, isolated from each other and without the possibility of observing the laws of art history, which have never been explored before now. We have here the most incontrovertible evidence in favour of the authenticity of the best stock of Chinese archaic bronzes ....' (pp. 86-7).

In these two quotations it is fully evident that Karlgren regards forgers of bronzes as ignorant men with little or no knowledge of the materials they faked. None of them could have attained the skill of a van Miggeren or a Charles Dawson and duped their fellow countrymen let alone the few Westerners who have studied bronze vessels! Unfortunately we know very little about the work of forgers in this field and we are unable to
incorporate in this survey detailed information about their methods. For this reason it seems strange that Karlgren is so certain that their efforts can be so easily detected or that they could not possibly have produced articles of a kind consistent with the inscriptions they contained. Actually forgers had (and may still have to some extent) a fairly easy task in creating bronze vessels of particular styles and decor in which they might incorporate appropriate texts. Since Sung

38. Professor Sekino Takeshi of Tōkyō University (formerly called the Imperial University) described to us the extent of forgeries carried out in a large factory near Wei Hsien (衛縣) - the home of Ch'en Chieh-ch'i! - in Shantung, which he observed during his travels and excavations in that region. All manner of antiques from oracle bones and sherds to bronze vessels and porcelain were produced in this factory. Such an establishment could conceivably produce a series of bronzes that would fit the requirements laid down in the preceding quotations. Doubtless numbers of such factories have been in existence at various times in China, and the same factory would tend to produce bronzes with a homogeneity of characteristics. It seems to us least likely that forgers were a series of individuals each producing bronzes without any possibility of their separate products maintaining the characteristics of former recorded vessels; it is more reasonable to suppose that they worked in groups or in factories wherein the difficult art of casting could be more economically carried out. That so many bronzes form natural groups is no doubt partly a result of this. It is greatly to be doubted that many individuals were capable of fashioning a clay or wax vessel model inscribing it with archaic characters, making from it a mould, preparing the metal for casting, carrying out the process of casting and then aging the resulting vessel. Obviously some form of division of labour would be required, although it must be assumed that some gifted individuals were able to carry out every one of these tasks on their own - such workmen must have been rare for metal casting requires both skill and facility such as few people possess, to cope with all stages of this art.
times the three illustrated catalogues, the Po ku, the K'ao ku, and the Hsü k'ao ku, have offered information regarding vessel-types and decor as well as inscriptions to all who were interested. Chinese scholars have realized that they were indeed used in the production of many of the bronzes listed in the early Ch'ing Catalogues, and on the basis of comparisons with the Sung Catalogues have discovered a considerable number of fakes. Their investigations have not, unfortunately, been directed critically enough towards the determination of fakes in the Sung Catalogues themselves and as many inscribed vessels in these catalogues are spurious, but not generally recognised as such, many later forgeries based on them are consequently accepted as being genuine.

If this latter point is correct, then it is not at all surprising that a systematic grouping of bronze texts would result in distinct series of parent vessels. If a number of vessels

39. If, on the other hand, the inscribed vessels grouped by Karlgren illustrated a natural development of vessel-types and of decor elements in conjunction with particular features in the inscriptions throughout the chronological arrangement of vessel groups, then, indeed, we might have little reason to suspect them except in a few individual cases where forgers, not realising the existence of such development, may have left their mark. Such a development is absent in this material. The sudden appearance of the Middle Chou style is a particularly suspicious feature. If it were a case of alien invasion (the Chous were certainly not greatly different in race or culture from the Shang peoples they overran) Karlgren's explanation might be accepted.
have been detected as forgeries merely because the forger was careless and placed, say, an Eastern Chou inscription on a Western Chou or Yin style vessel, this does not mean that other forgers were not capable of putting the right inscription on the right kind of vessel. It is indeed more likely that the forger would make certain that he produced an acceptable article particularly if it was meant to be sold to learned collectors. If, on the other hand, the vessel forged was intended for sale to collectors whose sole interest was merely in the accumulation of antiques and not in the study of them, little regard would be necessary to the production of clever fakes. Much of such material seems to have found its way into the Imperial Collection, rarely into the hands of scholar-collectors.

It seems somewhat naive to assume that forgers were incapable of analysing the decor and style of vessels in existence or recorded at the time that they worked. Because we possess little published material of an analytical kind by earlier scholars, this is no proof that an analysis of bronze decor and shapes was not made by those who stood to profit best by such an investigation. It is, moreover, not at all improbable that numbers of inscribed bronzes were forged with the connivance of expert collectors themselves.

40. The general appearance of many forgeries - particularly certain aspects of the inscriptions - is strongly suggestive of the hand of a scholar in the compilation of the text. Such great scholar-collectors as Juan Yuan were not averse to trying
4. Karlgren next proceeds to consider the reliability of experts in this field and states:

'Is there then really no risk of our conclusions proving misleading through our basing them on spurious inscriptions? There certainly is a considerable risk, and that is why we have repeatedly emphasised the importance of working only with materials accepted by the best Chinese experts.' (p. 15).

Later he continues in much the same strain:

'It cannot be too strongly underlined that we Western students should avail ourselves of the expert knowledge of Chinese collectors .... if we follow him (Jung Keng) and make it a rule never to quote a bronze which he has not sanctioned, we are certainly, on the whole, on the safe side.' (p. 16).

Regarding this matter sufficient evidence has been presented to 40. their hand at casting bronzes - Jung Keng (op. cit., p. 160) quotes a record of an attempt made by Juan in 1803 to cast Po style bells. Shang Ch'eng-tso (op. cit., p. 290, Chin ling hsüeh pao, vol. 3) refers to a further point of interest: 'The San Shih P'An was unearthed during the reign of Chia Ch'ing and later was sent as tribute by Juan Yuan to the Ch'ing Court.' The two records thus placed side by side suggest a possibly profitable avenue of research - it is well enough known that many of the Imperial Ch'ing Catalogue vessels came into the Imperial Collection as gifts and tribute. With an intrinsic value far exceeding the base metals from which they were manufactured, they formed ideal objects for this purpose. Unscrupulous subjects (we do not propose to regard Juan Yuan as such) might well have shown their contempt for the Manchus while at the same time lightening the financial load of costly presents by palming off faked antiques as part of the presentations.
illustrate the considerable risk that may attend an uncritical acceptance of the opinions of even the best Chinese experts. So fine a scholar as Jung Keng has contributed a tremendous volume of important research in this field, and his *Shang chou yi ch'i t'ung k'ao* ranks highest amongst the major works published to date; nevertheless, it was written in a period when serious archaeological excavation was just commencing and there existed little material of Chou period provenance that was thoroughly attested. In any case scholars up to that time had little reason to believe that newly excavated articles would exhibit characteristics markedly different from those with which they were familiar in the general body of inscriptions; there was no incentive to study fully attested materials separately and then view the results of such an examination in the light of current knowledge of the archaic inscriptions. The latter body of documents was vast in extent and even now tends to cloud the actual nature of the archaic documents and the script in which they were written.

The previous research which Karlgren and recent scholars have followed is no longer entirely acceptable; particularly in respect to the determination of forgery or of the authenticity of the bronzes. Even without reference to the rapidly growing numbers of fully attested materials it is quite evident that not only was forgery practised from earliest times but also that scholars and collectors lacked the facility as well as the
ability (from the point of view of research technique) to discover more than a few of the deceptions that confronted them. The sources available provide ample evidence that a completely new attitude is required and it is perhaps best illustrated by means of the following chart summarising the situation as it has been discussed in this Section:

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Period</th>
<th>Particular Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. unorthodox nature of vessel</td>
<td>1040 - 1090</td>
<td>'legal' imitation of archaic vessels; first catalogues compiled; numbers of vessels with vague testimony.</td>
</tr>
<tr>
<td>2. appearance of cutting or chiselling,</td>
<td>1090 - 1170</td>
<td>later Sung Catalogues compiled; little thought given to forgery.</td>
</tr>
<tr>
<td>3. artificial patination of lacquer and vermillion,</td>
<td>Circa 1140</td>
<td>no further catalogues; discoveries of archaic vessels rare; items 2 - 7 found in the first long study of forgery compiled nearly two</td>
</tr>
<tr>
<td></td>
<td>Circa 1220</td>
<td></td>
</tr>
</tbody>
</table>

41. It is convenient at this stage to record in the space of a few pages the criteria evolved during the last six or seven centuries; later duplications of earlier items are not repeated; the above list incorporates all important criteria scattered throughout the various extracts placed in a chronological order. For further convenience a few remarks regarding the situation of Chin Shih Hsueh in each 'period' are added.
4. odour when vessel is warmed,

5. coarseness of decor and inscription,

6. colour of bronze and patination,

7. harsh sound of metal when struck.

8. vessels obviously moulded from genuine (?) originals,

9. genuine and faked vessels exhibit physical differences,

10. fakes constructed from fragments of genuine (?) originals,

11. certain vessel-types masquerading as ancient vessels.

12. repetition of preceding items.

<table>
<thead>
<tr>
<th>Item</th>
<th>Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>15th cent.</td>
</tr>
<tr>
<td>9</td>
<td>1750-1800</td>
</tr>
<tr>
<td>10</td>
<td>1750-1800</td>
</tr>
<tr>
<td>11</td>
<td>1750-1800</td>
</tr>
</tbody>
</table>

centuries after the mania for collecting commenced; later Sung Catalogues record forged copies of inscribed bronzes first published in the k'ao ku Catalogue, but contemporary scholars do not appear to have been aware of these facts. 42

passing reference to Yuan period forgery; re-editions of Sung Catalogues but no new publications; new discoveries rare; enthusiasm for collecting bronzes greatly decreased; items 8 - 11 included in second long account of forgery - this and one other account are concerned with methods of faking patination.

Liang T'ung-shu's plagiaristic essay exhibiting even less understanding of the problems than his predecessors; period of the Imperial Ch'ing Catalogues; discoveries rare;

---

42. Several examples are discussed in Section Four, pp. 8 ff.
13. incomplete characters, imperfect literary style, imperfect calligraphy, defective syntax;

14. character stroke grooves indistinctly cut,

15. genuine and forged bronzes polished by hand differ,

16. characters engraved in lightly patinated areas but not in heavily patinated areas,

17. lack of foreign matter in character grooves of forgeries,

18. character stroke grooves wide at base and narrow at top - forgeries do not exhibit this,

19. characters lack strength and precision,

20. badly formed characters,

21. faked inscriptions engraved on genuine vessels,

<table>
<thead>
<tr>
<th>1800-1929</th>
<th>Circa 1850</th>
</tr>
</thead>
<tbody>
<tr>
<td>Juan Yuan's Chi ku Catalogue; Ch'en Chieh-ch'i's criteria - many important items but they were not applied even to bronzes in his own collection; first attempt to discover criteria of forgery on basis of the inscriptions; Ch'en's major discovery was practice of forgers of engraving textless vessels; enthusiasm for collecting bronzes rapidly mounting and greater attention being paid to the historical significance of the inscriptions; several important catalogues published and a few discoveries of bronzes recorded but testimony is generally unacceptable.</td>
<td></td>
</tr>
</tbody>
</table>
22. Tracings of existings inscriptions made on forged vessels; original deficiencies are smoothed over.

23. Phrases and sentences copied from the Shu and the Shih.

24. Confused manner of compilation.

25. Character discrepancies.

26. Inscription and vessel both faked.

27. Genuine inscribed fragment inserted into textless genuine or faked vessels.

28. Forged copies made in Ch'ing times on basis of Sung Catalogue illustrations (6 methods of comparison).

29. Vessel types and decor that are not ancient.

30. Shang and Chou vessels inlaid with gold or silver.

<table>
<thead>
<tr>
<th>Chang Chih-tung; item 23 also suspected later by Maspero.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jung Keng; his investigation of Ch'ing period forgery is the first important step in clearing away spurious texts; numerous catalogues printed since turn of century; with discovery of oracle bones and work of Academia Sinica greater efforts made in inscription studies;</td>
</tr>
</tbody>
</table>
31. character structures influenced by Sung Catalogue texts,

32. selections of phrases and sentences from existing inscriptions,

33. texts copied from existing inscriptions but omitting words or phrases,

34. texts copied from others on to smaller or larger surfaces and inscription area reduced or enlarged,

35. perfect copies of existing genuine (?) texts,

36. forgeries appear in greater numbers in later catalogues,

37. identical vessel types and decor with similar inscription types but no connection between personal names, localities, etc.,

Shang Ch'eng-tso; important criteria developed but still investigations are limited by characteristics of general body of inscriptions; Shang does not seek to apply his criteria extensively;

no doubt is felt as to authenticity of Sung Catalogue inscriptions although Jung Keng has illustrated the extent of forgery in a similar situation in late 18th century;

Hsü Chung-shu; some interesting suggestions but the criteria are not extensively applied;
38. inscription must be placed in correct location for the particular vessel-type,
39. vessel-type, decor and inscription type must be chronologically in accord,
40. if the date accords with the san-t'ung-li system it is a fake,
41. same inscription repeated in series of vessels,
42. inscription accounts do not accord with traditional texts,
43. parallel allusions to historical persons and events,
44. discrepancies in chronological classification as established by Karlgren.

Although the list of criteria is an imposing one and may seem sufficient in itself to have weeded out whatever spurious inscriptions that may exist in the repositories, the outstanding

43. Karlgren's attitude to the bronzes is simply one of general acceptance; the points put forward in favour of their authenticity were merely attempts to illustrate that they were, in his opinion, genuine materials. In only a few cases has he suggested certain vessels to be suspect and hence possibly forgeries.
feature to note is the limited use made of the criteria which are capable of extensive application. This observation has been stressed several times in the preceding pages and is one whose significance should not be underestimated. If the scholars concerned have been content to examine a relatively small number of inscribed bronzes which they believe to be forged, or else, discuss in general terms the characteristics which they consider to be those of forgeries, and having listed the items with perhaps, a few illustrations, to leave the subject at that stage, the inadequacy of their research must be immediately evident. No thorough scholar would be happy in accepting the criteria so incompletely determined any more than he would accept the authenticity of the many hundreds of bronzes to which such criteria were never applied! With the exception of Jung Keng's excellent study of forgery in the Imperial Ch'ing Catalogues there has never been attempted a similar survey of forgery amongst any other large group of catalogues or inscriptions; all the studies published and available treat only a few examples and avoid the consequences of a more thorough and extensive investigation.

It will be observed, also that the situation of Chin Shih Hsüeh in the 11th and 12th centuries is one hardly conducive to a complacent acceptance of the inscriptions recorded in the Sung Catalogues:
Plate 2. Fragment of Sung period engraved stone printing of a page of the Li Tai Catalogue.
These have two disadvantages. On the one hand, the vessels are almost all lost and we have to go after clumsy drawings (of vessels and characters). On the other hand, we have not even the original drawings but only more or less late reproductions of them. Thus we cannot study the handwriting or the finer details of the decoration. Yet the Sung works have a very great advantage; they seldom present any forged materials. In them we escape all the Yuan, Ming and Ts'ing copies of archaic bronzes. In Sung time the knowledge of archaic art and epigraphy was still too little developed to allow of forgeries on any considerable scale or of a quality calculated to deceive.' (Karlgren, op. cit., pp. 14-16).

44. Some of the statements in this passage are not entirely correct; there remains a Sung period edition of the Hsiao t'ang Catalogue (dated 1177 A.D.), lodged in the Seikadô Bunko, reprinted by photolithography in the Hshu ku vit'sung shu; fragments of printings made from engraved stone plates of the Li tai Catalogue of Sung period date were discovered in Peking in 1929 and are reproduced and discussed by Hsü Chung-shu in early numbers of the Bulletin of the Academia Sinica (vol. 2, pt. 2; pt. 4). Comparison of these sources with various editions of Ming and Ch'ing times exhibits the particularly careful and accurate transmission of the inscription texts through successive block-cuttings and reprintings over a period of seven centuries. There has been no serious attempt made yet to assess the reliability of the Sung Catalogue inscriptions by means of a painstaking comparison of the six Catalogues in their various editions; some indication of the results that may be expected is given in later pages in this survey. It is not absolutely clear as to what Karlgren means by 'original drawings' - if this refers to rubbings taken from the original vessels attention should be drawn to the Fu chai Catalogue published on the basis of a manuscript copy by Juan Yuan - the rubbings of inscriptions incorporated were originally of Sung date as was indeed the whole manuscript. In Jung Keng's Ts'in chin wen lu (1/36a) is reproduced a rubbing appearing on Sung period paper of a portion of a 'weight and measure' text of Ts'in. With materials such as these available it is actually possible to "study the handwriting" of the inscriptions reproduced in the Sung Catalogues; as to the drawings
Although the original vessels in the Sung Catalogues now no longer exist and investigations of the inscriptions are restricted to Sung, Yuan, Ming and Ch'ing editions of the Catalogues, the disadvantages are by no means so great as suggested above and upon a careful and systematic study of various editions of the Sung Catalogues, together with other relevant materials, the reliability of the transmitted illustrations becomes clearly evident. As to the extent of forgery in this period, however, both the Catalogues and the extracts quoted in this Section exhibit ample reason to believe that forgery of a reasonably high standard did indeed develop in the earliest recorded stages of Chin Shih Hsueh.

These two observations are, we believe, matters of extreme importance; on the one hand it is obvious that the inscriptions (or inscribed vessels) reproduced in the 

of the vessels it is fully obvious that they have been copied from rubbings mounted on 'kakémono' wherein the loss of perspective and the disproportion of decor size and area to that of the vessel is a normal feature of this form of mounting. As such they may be regarded as faithful copies and quite reliable materials for stylistic studies. The Sung Catalogues need no apology for careless reproduction - they are actually correct and reliable publications (some of the later editions, naturally, are to be excepted).

As to the absence of 'Yuan, Ming and Ts'ing copies of archaic bronzes', it would be unusual to find reproductions of them in the Catalogues; but as to forgeries and copies made in Sung times details of these appear in later pages of the survey.
Sung and early Ch'ing Catalogues possess practically no acceptable support of their authenticity; on the other hand, it is equally obvious that the relatively few scholars who have studied the problems of forgery have not pursued their enquiries as thoroughly as the materials require. As the preceding table of the criteria evolved over nine centuries shows, long periods passed without any thought or concern being expressed on so crucial a subject; from 1050-1850 the criteria were practically valueless, then Ch'en Chieh-ch'i discovered the practice of engraving spurious texts on text-less vessels. Then there was a lull for 70 years and since the late 20's of the present century more consideration of the problem was made. But the principles underlying the relatively insignificant amount of research accomplished were only in a few cases reasonably well established and in practically none were they extensively applied. To accept the inscriptions as genuine documents under such circumstances without further thought of their authenticity is hardly justifiable.

45. The total number of individual inscribed bronzes stated to be fakes in writings from Sung times to the turn of the present century is remarkably small - less than a score of cases! Over this period the practice of forgery was fully realised, but scholars were ever cautious in labelling any particular specimen to be a fake. With few exceptions, only general groups of bronzes were classed as spurious.
In the succeeding Sections of the present survey the question of forgery will be attacked from its most vulnerable angle - the inscription. The production of bronze vessels whose shapes and decor accord with ancient examples is not necessarily a difficult undertaking, but the compilation and the engraving in archaic script of an inscription text is a task that can tax the ingenuity of even the most advanced scholars, especially if all evidence of the fact that it is a recent writing is to be eliminated. In the inscription the forger leaves more evidence of his handiwork than he does in the rest of the vessel, but the means of proving this to be the case have only in recent decades become available. Fully attested inscriptions provide the evidence of the actual nature of the archaic script and upon a careful study of the increasing numbers of genuine archaic documents acceptable criteria determinative of forgery in unattested or vaguely attested inscriptions can be discovered.
SECTION TWO.

The Principle of Constancy of Character Structures.

Since the establishment of the present regime in China, archaeological surveys have progressed remarkably and numerous sites have been systematically excavated, yielding large quantities of invaluable materials which are gradually becoming available to Western sinologists for study in various publications now procurable from the mainland. Amongst this growing accumulation of ancient artifacts appear numbers of objects from Shang and Chou period sites containing inscriptions whose authenticity is beyond doubt; scientific excavation of the ancient sites is now a reality far surpassing the hopes of students interested in the formative periods of Chinese culture, who only two decades ago were patiently awaiting the results of China's first controlled excavation of a historical site — that of the Shang capital lying below the soil near the village of Hsiao T'Un. Thanks to the efforts of the old Academia Sinica and now to the immense activity of its worthy successors, it is

1. Jung Keng (op. cit. Chap. I) presents details of archaeological excavation carried out under the last regime (see also Karlsgren, Huai and Han, B.M.F.E.A., vol. 13, pp. 6-9). Some of the excavations were merely glorified grave-robbing and consequently it is not possible to be sure that all inscribed objects stated to have come from such sites as Loyang and Shou Hsien are reliably attested.
possible to commence a revision of earlier studies of the ancient script upon the basis of thoroughly reliable documents originating from various parts of China, datable in Shang, Chou and Chan Kuo periods, and executed in several different media upon a variety of surfaces.

Much has been written about the pre-Ts' in script but previous studies lack discrimination in the choice of documents surveyed; any document that appears ancient, or has been accepted by some well known collector or scholar as a genuine text written in Shang or Chou times, has been unquestioningly incorporated. As the great majority of known inscriptions lack any sort of acceptable testimony it is not surprising that scholars brought up in this atmosphere have tended to regard the matter of scientific testimony as unimportant and prefer to rely rather on the intuition of 'experts' whose vast knowledge of the materials has always been held sufficient to cope with possible forgeries. The forger has usually been held in contempt as may be judged by the somewhat low standard of research hitherto attempted in determining the extent of forgery in recorded and existing inscribed bronzes. In this short survey, therefore, we propose to examine all available pre-Ts' in documents whose discovery is fully attested by scientific excavation or is otherwise reliably attested; inscribed objects in collections and catalogues whose only testimony is a mere 'found at Loyang' or 'excavated in Chi Shan Hsien' etc., the
origin of which statement can be traced no further back than to a dealer's shop or to some unknown authority, will be disregarded except in one or two marginal cases about which more will be said later.

The survey will thus in the first instance be concerned only with wholly reliable materials; inscriptions whose origin is shrouded in doubt, mystery or ignorance may be referred to as the study proceeds but will not be permitted to influence the results of the examination of the reliable documents until these are fully discussed. This may seem to be a straight-forward method and hardly one necessitating particular comment; however, when the reader realizes that in the case of inscribed bronzes, for instance, the discipline will require a casting aside of over 90% of the corpus of bronze inscriptions, he may truly begin to wonder if so drastic a measure may not indeed defeat its purpose. Numbers of unattested but genuine inscribed vessels must exist in the great repositories, and as these are omitted, will the results of the survey be valid? We believe that they will be both valid and valuable; valuable because they will comprise the first study restricted to properly attested materials, and valid because there is a sufficient number of reliable documents upon the examination of which reasonably accurate conclusions can be drawn. It is not intended, however, to attempt an all-embracing study of the char-
acteristics of ancient Chinese script in the genuine documents but rather our attention will be directed towards the understanding of a hitherto unnoticed aspect of the characters: the lack of structural variations in cases of identical characters in individual documents. Although it may seem to be a somewhat insignificant point to pursue, it will be realized soon enough that not only is it a most important principle in the writing of Chinese script - ancient or modern - but also that the available attested documents offer more than sufficient proof of the validity of this newly discovered principle.

The principle may be expressed as:

'in any individual document the structures of recurring characters are constant.'

Although this enunciation may seem clear enough, it is necessary to consider its meaning and implications at some length.

Any person writing frequently in the script that he normally employs, does not indiscriminately vary the structural composition of the characters. Always will he write the same character on the same structural principles. In the archaic script of Shang and Chou we are not concerned with such phen-

2. In later times purposeful exceptions will be found which are classifiable as a sort of calligraphic affectation; they do not affect the present discussion which is concerned with the ordinary everyday writing employed in the pre-Ts'ın documents of our survey.
omena as 'running hand', 'grass' characters or abbreviated forms - a few examples do exist in pre-Ts' in documents but they are easily recognised as such and because of their rarity need not occupy our attention here. Nor are we concerned with the variations of an individual scribe's handwriting as it may evolve or change during his lifetime. The documents with which we are dealing are for the most part comparatively short; each one is obviously the work of one person and we assume that the period spent in writing any particular document was merely a matter of minutes or perhaps, in the case of bronze inscriptions, it may have required an hour or two's work. However this may have been, the texts exhibit no characteristics suggesting that a number of people had a hand in writing any individual document, nor do we find any reason to believe that any one document was written gradually over a long period of time by one or more scribes, a circumstance which would possibly allow structural variations to develop in the cases of recurring characters in the same document.

The term 'document' should be amplified. In the Shang oracle bone texts, for instance, a single bone or tortoise shell

---
3. Two examples of 'grass' characters (?) appear in texts engraved on lacquer objects of Chan Kuo period date (Jao Tsung-yi, Chang sha ch'u t'u chan kuo ch'u chien ch'u shih, figs. 1 and 2, plate 2); abbreviated characters occur in several pottery seal texts illustrated later, p. 48.
may have engraved on it two or more separate texts; each of these should be regarded as a separate document. As we do not know the customs involved in recording the texts, the results will be more reliable if the oracular inscriptions are so regarded. Although the name of the 'diviner' may be repeated throughout a series of texts on the one bone or shell, we cannot be absolutely certain that he wrote and engraved each small 'document' himself or that one or more scribes in his employ were responsible for the final engraving of the record. Whether this attitude is justifiable or not matters little for, as the results show, constancy of character structures prevails throughout the documents on any one bone. Moreover, the script on separate bones containing the names of the same diviners is, as far as we have been able to judge, constant in character structure; to examine and illustrate this feature conclusively would require many months of labour as well as access to all available published catalogues. We prefer to record this only

4. The examination of the oracle bones has actually been conducted on the basis of each bone being a document, for the numbers of repeated characters in any of the small 'documents' on any one bone are indeed few. The concept of the small 'documents' as expressed above is made simply on the basis that we cannot be certain whether all the 'documents' on one bone are the work of one person; if inconstancy of character structures is present then we must consider the possibility that it is a result of a different scribe's writing of the 'document' involved on the same bone.
as a general observation meantime. Bronze texts form precise documents; a vessel text and a lid text containing the same inscription, or a series of vessels containing the same inscription, are each regarded as individual documents. Not always is it certain, however, that identical texts on separate vessels were necessarily engraved by the same artisan. In the case of the Bamboo Texts each tablet is likewise treated as a separate document although they seem for the most part to be the work of one scribe only. The Ch' u Silk Document is considered as a single scribe's writing but it must be admitted that the short peripheral texts may possibly be separately written documents.

The term 'structure' must also be explained at length; the structure of a character is analysed (a) as the component elements of which it is formed and (b) the way of writing the individual elements of a composite character, (i.e. stroke numbers and stroke positions), or if the character is itself a single-element character, the manner in which it is written.

'Structure' is a completely different concept to that of 'shape';

5. In making this statement we have taken into consideration the possibility that more than one person of a particular name, say ", lived and held the position of a diviner during the several centuries of the Shang documents; thus cases of inconstancy, if appearing in a series of all of them, may be due to chronological changes in the evolution of the script rather than to the generally held opinion that character structures lacked standardisation in ancient times.

6. All fully attested vessel and lid sets with inscriptions engraved in both the vessel and in the lid maintain constancy of character structures although they are separate texts.
we are not concerned with character shapes which may vary from scribe to scribe and would, not unsurprisingly, vary within a single document written by any individual scribe. The characteristics of the archaic characters which are analysed later are all concerned with the 'structure' of the characters; shape variations are not usually of significance although they may occasionally be discovered to cause apparent variations in character structures, e.g. the forms: ,+;  Ç;  ;  ; etc. in the Ch'ü bronze engraved texts. The two conceptions of 'structure' explained above are more precisely termed: (a) structural composition, (b) constancy of structure. The structural composition of identical characters is usually constant, i.e. the component elements in each occurrence of a character are usually the same; an example of an exception to this rule is to be noted in ins. 22.9. In this text the investee's name occurs twice, written as  and as  ; in the second occurrence the left-hand element was omitted; in both cases the characters represent the same thing - the name of the investee. They were originally intended to be the same character, but the difference in composition is probably due to a form of abbreviation having been applied: the first character written in its complete form was easily and unambiguously recognisable in its second occurrence with the 'radical' omitted. Such examples are very rare amongst attested inscriptions. Con-
stancy of structure may be illustrated by means of this same example: the element 贞 is repeated with no variation in the manner of writing at all. An example of inconstancy may be noted in the varying ways of writing the character 贞:

These are all to be found in the famous San Shih P'an inscription. Although shape differences are to be noted (e.g. the two 'legs' in the second to the fifth examples), the legs of the first illustrate a marked structural variation from those of the other characters. With the possible exception of the third and fifth characters, inconstancy of structure may be observed in the 'head' portions; it is also evident in the uppermost element of the characters.

These examples should make clear the difference between 'shape' and 'structure' on the one hand, the distinction between 'structural composition' and 'constancy of structure' (of characters or elements of characters) on the other. In the above characters the structural composition is constant but the character structures are inconstant. It is very seldom that we need

7. We refer here to the original inscription as illustrated in Juan Yüan's catalogue; there are at least two spurious copies of this inscription. Takata notes one in his Kochūhen, we have seen a rubbing of a third inscription in a private collection. In each copy the forger maintained the characteristic of inconstancy in respect to the above character as well as to the several others to be observed in Juan Yüan's original handcopie.
Fig. 3. Oracle bone texts with considerable repetition of identical characters illustrating principle of constancy of character structures. For the originals see Yin chi yi ts'ung, nos. 58 and 945.
refer to structural composition and in the few cases where it is implied, the term will be written as such. Structural variations are nearly always those of the actual writing of the character; they may occur in one or more elements of which the character is composed and in the case of simple one-element characters the whole character is varied because of incorrect writing.

Structural variation of recurring characters in the same text is the result of carelessness or of ignorance, or of a combination of both. It is our considered opinion that any archaic style text exhibiting inconstancy of structure in repeated characters, or in elements thereof, cannot be accepted as a genuine document of ancient times; such carelessness and ignorance may only be ascribed to the writing of persons unfamiliar with the archaic script or to those whose knowledge of it is conditioned by an uncritical study of available specimens; for instance, amongst the inscriptions in the six Sung Catalogues of ancient bronzes, the majority of which are unattested, variations of structure occur within many inscriptions and numerous varieties of writing individual characters may be found in one text or another. Forgers of the early Ch'ing period noted this characteristic and produced inscribed bronzes to accord with it. Inscribed bronzes illustrated in late Ch'ing catalogues and in recent catalogues manifest fewer examples of
character structures being inconstant; this is possibly a result of greater numbers of authentic articles being incorporated; it is also possibly illustrative of the higher standard of forgery that has obtained during the last century.

The fully or acceptably attested documents which have been examined in determining the nature of the archaic script from the point of view of character structures comprise the following groups:

1. **Shang Oracle Bone Texts.** Somewhat more than 21,000 individual fragments have been thoroughly examined. Large as this total may appear, it probably amounts to less than a fifth of the number of existing or recorded bone texts; we are limited in our survey to the small number of catalogues of oracle bone texts available in this country. Happily, the catalogues available (see Bibliography for details) contain between them nearly all the longest known documents of Shang; documents that we have not been able to examine are for the most part small fragments of bone with only a few characters engraved on them. A large percentage of this material would be practically useless for the survey in any case. The catalogues consulted form two groups – those published since the first decade of this century containing mainly insufficiently attested documents, and two recent catalogues incorporating thoroughly attested documents only. Amongst the first group we know from our study of the
Plate 4. Rubbing of ins. 52.3 illustrating constancy of character structures in late Ch'un Ch'iu times. The inscription is studied in detail in Section Six.
second that there is a very large proportion of genuine bone texts reproduced; the two recent catalogues act as a very effective control and it is possible thus to conduct this section of the investigation confident that forged materials will not affect the results.

2. Fully Attested Bronze Inscriptions of the Western Chou Period. These amount to just over 20 different inscriptions of which four are particularly important. The total number of Western Chou style inscriptions is in the vicinity of 420 different texts, some are vaguely attested, but the majority of them lacks any testimony at all. Because the number of indisputably authentic

8. The numbers of inscriptions consulted are as follows (for full titles of the catalogues see Bibliography):

<table>
<thead>
<tr>
<th>Catalogue</th>
<th>Number of Texts</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.T.T.T.</td>
<td>929</td>
</tr>
<tr>
<td>Y.C.P.T.</td>
<td>874</td>
</tr>
<tr>
<td>Y.C.T.P.</td>
<td>1,000</td>
</tr>
<tr>
<td>Y.C.T.I.</td>
<td>1,525</td>
</tr>
<tr>
<td>Y.C.S.T.</td>
<td>564</td>
</tr>
<tr>
<td>Y.C.L.P.</td>
<td>750</td>
</tr>
<tr>
<td>Y.C.S.C.</td>
<td>1,104</td>
</tr>
<tr>
<td>C.K.W.L.</td>
<td>930</td>
</tr>
<tr>
<td>Y.C.H.P.</td>
<td>343</td>
</tr>
<tr>
<td>F.S.Y.C.</td>
<td>1,125</td>
</tr>
<tr>
<td>K.T.M.K.</td>
<td>56</td>
</tr>
<tr>
<td>C.S.T.</td>
<td>655</td>
</tr>
<tr>
<td>Reports</td>
<td>381</td>
</tr>
<tr>
<td>Chalfant</td>
<td>1,687</td>
</tr>
<tr>
<td>S.D.Z.S.</td>
<td>97</td>
</tr>
<tr>
<td>C.H.C.K.</td>
<td>5,642</td>
</tr>
<tr>
<td>Y.C.W.T.</td>
<td>482</td>
</tr>
<tr>
<td>Y.C.W.T.I.</td>
<td>2,832</td>
</tr>
</tbody>
</table>

Total: 21,032 texts.

As there is much duplication of identical fragments throughout these catalogues, the number of different documents would be in the vicinity of 15-18,000. Nearly 25,000 inscriptions were unearthed by the Academia Sinica over 12 seasons of excavation (Annals of Academia Sinica, No. 2, Pt. 1, May 1955, p. 94); the two Catalogues of properly attested texts available to us contain between them about one-fifth of this material, not quite half of the total has been published.

* The Y.C.W.T. Catalogue actually contains 1,300-1,400 separate fragments re-assembled to form 482 whole documents; it is thus a most important control of the validity of the principle in Shang times.
inscriptions is small it is impossible to employ them in assessing the genuineness of more than a handful of the general body of Western Chou style inscriptions by means of comparative studies of the script, the inscription contents, character usage, etc. (In Section Six, tentative attempts are illustrated).

3. Acceptably Attested Bronze Inscriptions of the Eastern Chou and Chan Kuo Periods. About 50 texts comprise this group the bulk of which were excavated at Shou Hsien; a few originate from other and widely scattered sites. Although we do not possess a great deal of information regarding the Shou Hsien finds, sufficient is known of their excavation and their almost immediate placing in public collections to warrant their acceptance as reliable materials; some were sold to private collectors and amongst these we can discern a few cases of forged texts appearing on undoubtedly genuine vessels. Those in public collections act as a form of control; characteristics of other attested documents from nearby sites are also useful as a further form of control. Three inscriptions, e.g. the 'Philadelphia vase',

9. Most of the inscriptions in this group have been described as 'closed finds' (Karlgren, Huai and Han, p. 6); we employ the term 'acceptably attested', but in effect our attitude to the authenticity of the articles differs from that of Karlgren only in the extent of materials selected.

The inscriptions accepted as reliable materials are:

<table>
<thead>
<tr>
<th>Inscription</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ins. 2.1</td>
<td>(lid, 5.1)</td>
</tr>
<tr>
<td>&quot;</td>
<td>(lid, 12.21)</td>
</tr>
<tr>
<td>&quot;</td>
<td>(vessel 2.1)</td>
</tr>
<tr>
<td>&quot;</td>
<td>(same vessel as 3.5?)</td>
</tr>
</tbody>
</table>
We are indebted to Mr John A. Pope, Assistant Director of the Freer Gallery of Art, Washington, for kindly forwarding fine photographic copies of the original manuscript. These have been checked again for possible cases of inconsistency, but the impression previously gained from Chiang's hand-copy is fully supported - Chiang unwittingly realised that constancy prevailed and, with a few exceptions, his copying is remarkably accurate.
(ins. 29.11), the Piao Bells, (ins. 61.1), and the Chün Ssu Tzu Hu, (ins. 46.2), are marginal cases as far as their testimony is concerned; the last two have been generally accepted as originating from Loyang but lack definite details of provenance. We have personally examined the Piao Bells and have observed certain physical characteristics in the patination which could not possibly be duplicated artificially.

4. The Ch’u Silk Document. This valuable text was discovered at Changsha in 1949; a few details of its excavation are noted by Jao Tsung-yi (Journal of Oriental Studies, Hong Kong, vol. 1, p. 69); that it is sufficiently attested for our purpose is not to be doubted. Unfortunately there is no available photographic reproduction of the document that may be consulted; three different reproductions we have examined are of a handcopy first published in Chiang Hsüan-yi’s Changsha.*

9. ins. 7.4
   " 7.6
   " 7.9
   " 7.15
   " 9.5
   " 9.7
   " 9.10
   " 12.12
   " 12.19
   " 12.21 (lid 2.3)
   " 12.22
   " 13.6
   " 14.8
   " 29.10
   " 43.7 (vessel text)
   " 7.13
   " 29.11
   " 46.2 (two texts)  ins. 7.5
   " 7.7
   " 7.14
   " 7.16
   " 9.6
   " 9.9
   " 9.11
   " 12.13
   " 12.20
   " 12.22
   " 13.7
   " 14.12
   " 33.6 (lid text)
   " 4.1 (eight texts)
   " 9.19
   " 39.1 (two texts)
   " 61.1 (four texts)
5. The Ch' u Bamboo Tablets. Forty three tablets of split bamboo containing brush written characters were excavated at Yang-t'ien-wu, Changsha, in 1953; they have been carefully copied and reproduced in Ssu Shu-ch'ing's Changsha yang t'ien wu ch'u t' u ch' u chien yen chiu. Together with the Silk Document they form a group of texts of inestimable value in studies of ancient Chinese script.

6. Pottery Seals from Shantung. In this group are included only the specimens obtained by Japanese archaeologists during the war in China and at present lodged in the Department of Archaeology, Tōkyō University.¹⁰

As the catalogues and other illustrated sources containing the above documents are, for the most part, generally available in Chinese libraries, only a few reproductions of the texts discussed here will be appended. We shall examine in detail only the documents which exhibit actual or apparent cases of inconstancy in the various groups; inscriptions not referred to (approx. 9% of cases) have all duplicated characters or ele-

¹⁰. Some further documents, e.g. the Stone Drum Texts, the Imprecation Against Ch'u, the Ts' in T'ai Shan Stone Texts, etc. have also been examined and the character structures found constant. As the testimony regarding these is unfortunately unreliable, they have been purposely omitted; we merely record here that constancy prevails. The investigation has proceeded further than this - Han period documents from Tun Huang and available reproductions of stone and mirror inscriptions have also been examined. Other than a few Eastern Chou inscriptions, all cases of documents from Shang times to Han exhibiting inconstancy available to us have been referred to or recorded in this survey.
ments of characters constant in structure in each individual document. It is possible that amongst the oracle bone texts, however, a few exceptions have escaped our notice; the eye-strain involved in a large-scale examination of some 100,000 or more archaic characters is immense and we do not doubt that human failing may have resulted in some omissions. These should not amount to more than a dozen or so texts in which the exceptions will most likely be classifiable as apparent ones rather than actual ones.

The following oracle bone texts contain examples of inconstancy:

1. Y.C.T.P. No. 39. ¦ and  sodom - one centre stroke missing; four other characters repeated - all constant.

2. Y.C.T.P. No. 847.  and  sodom - one centre stroke missing; three other characters repeated - all constant.

3. Y.C.T.P. No. 1,473.  and  ;  and  ; a forgery?

4. Y.C.P.T. No. 42.  and  - one centre stroke missing; two other repeated characters constant.

5. P.T.T.T. No. 468.  ;  ;  ; characters badly shaped; a faked copy of a genuine text?

6. P.T.T.T. No. 32.  and  - one horizontal stroke missing; six other repeated characters - all constant.

7. P.T.T.T. No. 20.  and  - one centre vertical stroke missing; five other characters repeated - all constant.

The above inscriptions occur in catalogues containing mainly unattested or unacceptably attested documents; nos. 2, 4, 6, 11. Altogether a score of cases exhibiting apparent inconstancy
and 7 may not be actual cases of inconstancy in the characters concerned - the missing strokes may have been inked in during the making of the rubbing or, perhaps, are only lightly cut in the original bone. Nos. 1, 3, and 5 seem definitely to be examples of inconstancy; 3 and 5 may be forgeries. The list is now continued with examples taken from some 3,300 fully attested inscriptions recently made available to us:

8. Y.C.W.T. No. 85.  and  ; the extra horizontal stroke in the second case is probably a fracture in the bone surface;  and  ; the slight variation in the lower element is merely shape variation. Ten other repeated characters are constant in structure.

9. Y.C.W.T. No. 17.  and  ; the centre horizontal stroke is apparently missing. Eleven other repeated characters - all constant.

10. Y.C.W.T. No. 11.  and  ; the small stroke may be a 'slip of the stylus'.  and  ; similar example to (8) above. Three other repeated characters are constant.

11. Y.C.W.T. No. 38.  and  ; essentially a shape variation. Five other repeated characters - all constant.

12. Y.C.W.T. No. 121.  is repeated four times, in one or two cases the small strokes in the 'towers' appear as either one or two in number. This seems to be a definite case of inconstancy - human error? Thirteen other characters are repeated 2-4 times each - all constant.

13. Y.C.W.T. No. 137.  and  ; a third 'arrow' stroke

11. have been noted and are not all recorded here; a full account is, however, presented of the extent of inconstancy in the fully attested texts which follow. The remaining dozen examples are for the most part only apparent cases of inconstancy similar to nos. 2, 4, 6, and 7 above. The hand-drawn copies in the Chalfant-Couling Catalogue are not reliable and reference to cases appearing in this work is omitted.
in the lower square element? Five other repeated characters - all constant.

14. Y.C.W.T. No. 102. \( \overline{\square} \) and \( \overline{\square} \) (3 cases); the two upper strokes are quite unnecessary and appear as though it were the more complex form of \( \overline{\square} \) written here; 17 other repeated characters - all constant.

15. Y.C.W.T. No. 31. \( \overline{\square} \) in one of three examples lacks the lower horizontal stroke in the upper portion of the character - this may be an actual omission for the rubbing is particularly clear here. Seven other repeated characters - all constant.

16. Y.C.W.T. No. 47. \( \overline{\square} \) and \( \overline{\square} \); usually interpreted as the Shang sovereign, \( \overline{\square} \), one inner stroke apparently missing but rubbing is not clear. Five other characters - all constant.12.

17. Y.C.W.T.I. No. 6400. \( \overline{\square} \) and \( \overline{\square} \); an extra upper horizontal stroke; eight other repeated characters - all constant.

18. Y.C.W.T.I. No. 6668. \( \overline{\square} \) and \( \overline{\square} \); the two inner strokes missing; this may be an actual omission. Nine other repeated characters - all constant.

19. Y.C.W.T.I. No. 6927. \( \overline{\square} \) and \( \overline{\square} \); the \( \overline{\square} \) element incomplete; an actual omission. Six other repeated characters - all constant.

20. Y.C.W.T.I. No. 6962. \( \overline{\square} \); the extra lowermost horizontal stroke may be an accidental scratching of the bone surface; all other repeated characters are constant.

21. Y.C.W.T.I. No. 6964. \( \overline{\square} \) and \( \overline{\square} \) (14 cases); there is a possibility that the missing inner stroke in each case is apparent only. Eight other repeated characters - all constant.

12. The inscriptions appearing in this catalogue are re-assembled fragments (see note 8) averaging more than 3 fragments to each reconstructed document. The fragments are, for the most part, reproduced from the three earlier catalogues of fully attested oracle bone texts published by the Academia Sinica (see Prof. F. S. Drake's review in Journal of Oriental Studies, Hong Kong, vol. 2, pt. 1); these catalogues are not available for study in Australasia.
22. Y.C.W.T.I. No. 7577.  and ; the extra inner stroke is definitely written. Two other repeated characters are constant in structure.

Amongst the above 15 examples there are 7 cases of apparent inconstancy (nos. 8, 9, 10, 11, 13, 16, and 20); minor cases of one stroke omissions or additions to 5 examples (nos. 15, 17, 20, 21, and 22); while major variations caused by additions or omissions of two strokes total 4 cases (nos. 12, 14, 18, and 19). If we take into account examples that have possibly escaped our attention, the number of cases of actual inconstancy would, we assume, amount to no more than a score - less than 1% of the fully attested oracle bone texts in the two catalogues. The validity of our principle is thus definitely established in respect to Shang documents.

It is well to note the nature of inconstancy as it appears in the characters drawn above. With the exception of nos. 3 and 5, there is not a single instance of inconstancy of the type illustrated on p. 92, which is typical in unattested Chou period bronzes. The scribes of Shang, even when they omitted a stroke of the stylus, did not vary the general structure of the character at all; the few omissions to be observed are, in nearly every case, comparable to the occasional failure of Western writers to dot an 'i' or cross a 't'.

In the attested bronze inscriptions of Western Chou there appears one case of variation in structural composition
of a repeated character (ins. 22,9); otherwise constancy prevails not only within the individual inscriptions but also obtains in cases of identical characters and elements of characters throughout the authentic texts. It is most unfortunate that there is such a lack of fully attested material from Western Chou sites that may be consulted. However, there is available evidence of another kind which strongly supports our contention that constancy of character structures was undoubtedly the rule in Western Chou times:

(a) it is a definite feature in attested documents of Shang and of Eastern Chou;

(b) recently discovered inscribed Western Chou style vessels lacking acceptable testimony nearly all exhibit constancy of character structures (these are noted in the Major Table at the conclusion of this work);

(c) in the general body of Western Chou inscriptions (both attested and unattested) those exhibiting inconstancy amount to only about 7% of the total;

(d) in the various catalogue groups (arranged chronologically) Western Chou inscriptions in the Sung Catalogues form the largest percentage of cases of inconstancy; the later catalogue groups have decreasing numbers of cases;

(e) the nature of inconstancy in unattested Western Chou style
characters is, in most cases, illogical and quite alien to 'normal' Chinese writing. The observer may well wonder that the inscriptions concerned have been so generally accepted regardless of so suspect a feature.\textsuperscript{13}

Eastern Chou and Chan Kuo period attested inscriptions form a much larger group and together with the Ch'\u Silk Document and the Bamboo Tablets offer substantial proof of our principle. Amongst the Shou Hsien inscriptions appear two cases of inconstancy (ins. 7.17 and 9.13) one of which may only be apparent (ins. 2.13, for it is very roughly engraved), but ins. 7.17 seems to be a definite example. Upon a close examination of rubbings of 45 individual Shou Hsien texts we have reason to believe that several of the inscriptions are faked copies of others which are genuine. Those we doubt are ins. 2.8, 7.10, 7.11, 7.12, 7.17, 9.1, and 9.8; they are all in private collections.\textsuperscript{14} Ins. 12.18, 12.19, and 12.22 are written in an ornate script but the basic structures of the characters are maintained; ins. 12.21, 13.6, 13.7, and 14.12 each contain the character 豆 written as 豆 with an added 'hand' element.

\textsuperscript{13} The reason for this attitude has been dealt with in detail in the first section of our survey. It should be observed also that thoroughly attested inscriptions have only recently been available for study, and that the impact of this new body of material on the old has yet to be fully assessed. Our survey is merely one of several steps in this direction.

\textsuperscript{14} The vessels on which they appear are no doubt genuine; the script in Shou Hsien bronzes is engraved, not cast with the vessels, thus recent forgers may easily inscribe textless vessels.
Other than this example of variation in structural composition, constancy of structures prevails also throughout identical characters in the Shou Hsien inscriptions with the exception of a few cases in the seven suspect inscriptions noted above. The remaining inscriptions: 7.13, 9.12, 29.11, 39.1, 46.2, and 61.1, exhibit constancy individually; identical characters throughout the group are, for the most part, constant but variations in structural composition may be observed in a few cases.

The Ch'u Silk Document contains more than 600 characters of which numbers are repeated many times; there is not a single case of inconstancy. Jao Tsung-yi has stated that several identical characters are constructed differently, but on close examination we find that his observation is made upon an unnecessarily stretched interpretation of the incomplete sentences containing the examples. In one case he contrasts two characters one of which does not appear in the Document at all.

Ssu Shu-ch'ing's copies of the Bamboo Tablets are executed with care, but we have found one or two minor mistakes in copying.

15. The examples he cites (p. 77, op. cit.) and the further cases to be noted in his modern character transcription of the Silk Document text (pp. 82-3) are all classifiable as variations in structural composition which feature does not affect the concept of constancy of character structures.

16. They are (1.5:22) and ; the latter does not appear in the Document.

17. Cf. 13.2:5 and 6.8:3.
Fig. 9. Ornamental script of Ch'u; ins. 12.22
nevertheless, the presence of constancy of structures is un-
wittingly realized by Ssu and proved by his copy. Only a dozen
of the 43 tablets are reproduced in the plates clearly enough
to check the extent of constancy throughout the documents;
Ssu, however, has had the opportunity of studying the originals
and his copy together with two different published illustrations
of the tablets we possess illustrate quite definitely the pres-
ence of constancy throughout the tablets.

Duplicated characters do not appear in the pottery seal
inscriptions but constancy of identical characters obtains
amongst the appended examples. There are cases of two charac-
ters: 虚 and 織, and 商 and 織, which are altered by
abbreviation, the basic structure is nevertheless maintained.
Abbreviated forms were, no doubt, in existence in pre-Ts' in
times, but examples are rare; the possibility that inconstancy
may be mistaken for abbreviation or for alternative forms has,
of course, been carefully considered during all stages of our
examination of the documents.18.

18. The Bamboo Texts contain altogether about 330 characters
with a variety of about 154 different characters of which more
than 100 are loosely classifiable as 'radical' and 'phonetic'
combinations: 37 different characters contain the 'silk' radi-
cal; 13 contain the 'metal' radical; 6 contain the 'tree' radi-
cal; 5 contain the 'man' radical; 7 contain the 'grass' radical;
7 contain the 'bamboo' radical, etc. The Silk Document exhibit-
s similar features; in the concluding section of the survey
some comments on the significance of the above are made (p.40/9).

19. The majority of the Eastern Chou and Chan Kuo period docu-
ments originates from Ch'u sites; the cultural level of this
Altogether more than 25,000 individual inscriptions of all kinds have been closely studied for evidence of inconstancy and of this group at least 15,000 are acceptable as genuine pre-Ts'in documents (i.e. the large number of unattested oracle bone texts) or are fully attested as such (i.e. the scientifically excavated Shang texts, Western and Eastern Chou inscribed bronzes, the Bamboo Texts, etc.). Unattested bronze inscriptions amount to several thousand items; there are various miscellaneous inscriptions which have also been consulted. Amongst this large body of documents there exists only about 100 inscriptions with character structures inconstant in any one document! Regardless of the problem of insufficient testimony, the above figures (approximations only) are in themselves a reasonably reliable check on our conclusions.

A further control is that of the nature of inconstancy of

19. 'barbarian' State would be expected to be somewhat lower than that of the Middle States. However, it would be most unusual if Ch'ü scribes alone had the custom of writing characters with constant structures; ins. 61.1, 39.1, 29.11, 7.13, together with the recently excavated Ts'ai bronzes form a group of documents which adequately illustrate that constancy prevailed in several widely scattered areas of the Middle States. The pottery inscriptions all come from Shantung sites and identical characters in these texts are generally constant in structure with those of Ch'ü and the above inscriptions.

20. Only in a few individual cases has doubt been expressed as to the authenticity of the unattested oracle bone texts by previous scholars; numbers of them may be forged copies of genuine fragments but it appears that newly engraved inscriptions can be determined upon inspection of the original (see Creel, Birth of China, p. 26). In accepting this body of generally unattested
repeated characters in the various inscriptions exhibiting this feature. If, as we have stated before, the variant drawings of identical characters in the one document are of an illogical kind and manifest characteristics which are undoubtedly those of writers unfamiliar with the script type involved, then it will be perfectly evident that the characters concerned were not written by artisans skilled in the production of inscribed bronze vessels. The character 佳, for instance, is written in hundreds of cases as 鳳 (Shang and Chou complete form), as 凰 (Shang abbreviated form) or as 般 (late Chou and Chan Kuo period development of the earlier abbreviated form); such drawings as 佳佳佳佳佳; etc. found in one document and sometimes separated from each other only by a few characters exhibit miscomprehensions that cannot possibly be ascribed to people used to writing or copying archaic characters. This view is supported from another aspect: the method of casting of bronze vessels is now fairly well known. Two important facts are definitely established:

(a) a vessel model was made of clay with the decor first drawn on with ink then carved in relief;

(b) piece-moulds were constructed around the model

20. Inscriptions as genuine materials we do so tentatively, for a thorough comparative study of the scientifically excavated documents with the unattested oracle bone texts has not yet been attempted.

21. In Ts'in and Han times the form evolved to 佳, with an extra 'feather' stroke from which the modern character 佳 developed as a result of a minor technical change in style of writing.
and casting was effected from the assembled moulds.

The preparation of the inscription area must have been carried out in the same way as the decor: the characters were written in ink on to the appropriate section of the model and then carved out in intaglio. Artisans who attended to the engraving would, no doubt, have carved out the characters in the same careful manner as they did the intricate patterns of the decor. This is, of course, an assumption, but, it will no doubt be granted, a justifiable one. In the oracle bone inscriptions there are examples of (uncarved) texts written in a red-coloured ink on the bone surface; there are also examples of ink characters and carved characters on the same bone - the engraving apparently incomplete. It would seem that the custom was for a scribe to record in ink the details of the prognostication then later the characters written thus were engraved over for permanency, possibly by a further person experienced in this job. On the basis of these observations we assume that the text written in ink on the vessel model was done by a person

22. See Shih Chang-yü's article on 'Bronze Casting in the Shang Dynasty' referred to previously (Section I, note 13) p. 121 although he does not discuss the use of ink, the method he suggests would allow for ink written characters before the engraving of the intaglio script.

23. Y.C.W.T.I. nos. 6423, 6814, 7775, etc.


who was a reasonably good calligrapher; the engraving was attended to by a skilled craftsman who would be no more liable to carve the character strokes incorrectly than he would be to confuse the intricate decor pattern - a much more difficult task of engraving. Whether he could write or not would be immaterial; his job was merely to engrave what was already written or drawn on the vessel model; the person who wrote the inscription text on the model would have been instrumental in creating inconstant structures of characters, if it was customary to do this.

As new inscriptions become available in archaeological journals and other publications from China the principle of constancy gains increasing support. Fresh evidence continues to arrive and it is not possible to incorporate it in the present Section. So well established is the principle, however, that we do not hesitate in affirming it to be a secure basis upon which the criterion - inconstancy of character structures - is definitely acceptable as proof of forgery. To illustrate the matter further, examples of characters with inconstant structures appearing in inscriptions classifiable as fakes because of inconstancy are

26. Constancy in recently excavated inscriptions is noted in some detail in Section Six which is devoted to a study of fully attested bronze texts and planned to include material which may arrive during the final stages of the writing of the survey.
listed in Table I following; the nature of the variant structures is clearly shown. Some minor cases recorded in the Major Table at the conclusion of the survey are omitted here; not all cases of inconstancy in each example are given in Table I. By consulting the Major Table the reader may note the numerous instances of vessel-lid inscriptions or of series of vessels containing the same inscription text but manifesting inconstancy in cases of identical characters from one inscription to another. The latter is an extension of the basic principle and although no attempt is made in the survey to prove it to be a reliable criterion of forgery, attested examples studied to date suggest strongly that it may be later found to be a criterion of considerable value. In the case of vessel-lid inscriptions it may not be premature to class cases of inconstant identical characters as fakes even at this stage. It is inconceivable that a reasonably clever craftsman would vary character structures in two texts of a set which presumably would be written and engraved in both sections of the model within a short interval of time. If he were able to maintain continuity in decor elements he would be able to maintain constancy of characters throughout the two texts. As regards a series of vessels with the same inscription text and made by the same individual, constancy should also obtain throughout the texts. However, cases of inconstancy will merely suggest that the later 'discovered' inscribed vessels are forged or
are to be suspected as such. The first vessel 'discovered', if otherwise unsuspected, may be a genuine article.

In applying this criterion of forgery we have made it a practice to be severe rather than lenient in certain 'marginal' cases; for instance, ins. 280.1 presents an obvious example in the characters 克, but in the case of the characters 當 the 'cowrie' elements, with one or two inner strokes, may not be considered entirely significant variations— they may be compared with the rare but similar one stroke additions or omissions noted in the oracle bone texts. However, the writing of the right-hand elements as 上, 丁, and 當— the first and third corresponding with two-stroke 'cowries' while the second appears with a one stroke 'cowrie'— is a pretty definite case of inconstancy. Seen together with the variations of the first character and with other examples in the inscription there can remain little doubt about the matter. In Sung Catalogue inscriptions the nature of inconstancy is such that the student who is fully familiar with the reproductions and has studied them carefully throughout various editions of the same catalogues, is in a position to recognise the painstaking accuracy in which the early compilers recorded the feature. Inconstancy in these inscriptions is not the result of successive re-cutting of blocks over eight or nine centuries— it is the perpetuation of a characteristic of the original inscriptions. It is to be expected that this
statement will be contested, and the opinion may be expressed that it would be wiser to leave the Sung Catalogues aside as unreliable reproductions for a detailed study of script characteristics. Our determination to accept them as reliable reproductions (with certain modifications, of course,) is partly expressed in the previous Section (note 44); to present full arguments is impossible in this paper without resorting to extensive illustration - this matter is to be dealt with in a separate paper.

Additional Note.

Since the writing of this Section Tung Tso-pin's Yin hsü wen tzu wai pien and the first volume of the new edition of the Shodo Zensatsu a Zenshu both books employ a most useful method of presentation of Shang oracle bone inscription texts. The rubbings are covered by a semi-transparent sheet on which hand-copies of the archaic texts are traced - this in the latter work; Tung places a hand-copy opposite the rubbing together with modern character transcriptions. A study of the hand-copies shows well the unwitting (?) realisation of the principle of constancy by the copyist - there is no evidence of inconstancy in Tung's hand-copies which reflect faithfully the nature of the originals; those in the Shodo Zenshu however, exhibit a few cases of apparent inconstancy which when compared with the originals are immediately evident as errors on the part of the copyist, e.g., Pl. 9, section 12, 4th character; Pl. 10a, section 2, 6th character; Pl. 10f, section 1, 9th character; Pl. 12c section 3, 11th character. A minor case of inconstancy may be noted in Pl. 12f; Plate 9 seems to have a few cases: cf. character 6 of section 17 with other examples on this large bone. This character being on the rounded edge of the bone does not show up clearly in the photograph - it may be an apparent case only. The hand-copies in this work are not entirely reliable - numbers of omitted strokes may be noted.
TABLE No. 1.

Examples of Repeated Characters in Individual Inscriptions Written Inconstantly.

With the exception of ins. T.500.1 and T.349.1 which exhibit numerous and striking examples of inconstancy, only two examples of the feature in the other inscriptions assembled here are illustrated. In a few cases one character only is repeated inconstantly and in several inscriptions the feature is limited to only two repeated characters.

The following examples are limited to one inscription text only; vessels with lid-texts or which are part of a series with the same text are represented by the earliest recorded reproduction. Faked copies are also omitted. Inconstancy throughout vessel-lid texts, a series of vessels with the same text, or in faked copies, is noted in the Major Table but without illustration.

Four of the following inscriptions are selected for detailed study in the succeeding Section. The remainder are incorporated after analysis in Table No. 2.
<table>
<thead>
<tr>
<th>S. 104.1</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T. 103.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>100.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. 100.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. 94.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. 92.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. 92.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>89.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>88.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. 88.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. 84.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>83.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>T. 74.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>74.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>71.2</td>
<td>66.1</td>
<td>S. 65.2</td>
<td>S. 60.3</td>
</tr>
<tr>
<td>------</td>
<td>------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>夏</td>
<td>商</td>
<td>西</td>
<td>西</td>
</tr>
</tbody>
</table>
SECTION THREE.

An Analytical Examination of Inscriptions Manifesting Inconstancy of Character Structures.

Having now established the principle of constancy in the archaic script of attested archaeological documents, the comparatively few cases exhibiting inconstancy of character structures in the general corpus inscriptorium will be further examined in an attempt to discover other evidence that may possibly be employed as criteria of forgery. Constancy of structure is, of course, no proof of authenticity - it is merely a characteristic of authentic archaic writing that may obtain in either genuine or spurious inscriptions; however, where inconstancy occurs the documents concerned are definitely fakes and there is every possibility that the unscrupulous compilers may have left evidence of their work in some other aspect of the script or even in the content of the inscription. It is our aim, therefore, in the present and the two following Sections to analyse a number of inscriptions in search of such evidence.

In the preceding Section, 55 inscriptions were illustrated as forgeries because of inconstancy; they will comprise the documents to be examined here. Features which we believe to be indicative of forgery will be noted and their occurrence throughout this group of inscriptions will be tabulated for convenient reference (Table 2) at the conclusion of the Section.
Four inscriptions only are selected for detailed study to illustrate the method of analysis while the remainder are recorded in Table 2 with the suspect features in each case denoted by code letters. The vessels containing three of the inscriptions have been personally examined by us: the Mao Kung Ting (ins. T.500.1) at present in Formosa - exhibiting one of the most extreme cases of inconstancy; the Hsi Chia P'an (ins. 129.1) in the Shodō Hakubutsukan, Tōkyō; and the Ch' en Yi Fu (ins. T.74.3) in the Auckland Institute and Museum, New Zealand. The last vessel has only recently been recognised as the original of the handcopies and rubbings published in various catalogues during the last 150 years. It contains an Eastern Chou style inscription and is one of the few of this period manifesting inconstancy of character structures. The fourth inscription, the Chia Yi (ins. 72.2) exhibits inconstancy and is included here to illustrate a particular aspect of forgery to which it is necessary to refer from time to time. In the case of this inscription it is possible to trace nearly every one of its phrases and sentences in prototypes that were available to the forger; the significance of this method of compilation in relation to such suggested criteria as 'muddled context' and 'meaningless sentences' will be immediately evident.

1. ins. T.500.1 The Mao Kung Ting.

1. The King spoke to this effect: "Fu-Yin,
great and illustrious were Wen and Wu; August Heaven was greatly satisfied with their virtue (has made us its counterpart) and has charged us with the possession of Chou. (We) have received the Great Mandate and have guided and cherished (even)

3. the Regions (whose Princes) have not attended (our) Court. Nothing was barred from the dazzling glory of Wen and Wu. Heaven was about to place its Mandate and also the Former Governors were able to assist their Sovereigns and applied (themselves) industriously (?) to the Great Mandate.

4. Thus August Heaven unweariedly watched over and protected (us in) our possession of Chou and greatly steadied (?) the Former Kings (in their) charge of the Mandate.

5. The power of Heaven is terrible and awesome (and in my) inheritance (of the throne), I, the Little Child, (do not attain) am not equal to the task. (My) Kingdom is on the point of disaster. Disorder prevails throughout
the Four Quarters (of the Kingdom). The Great

7. Attendants are restless. Alas! (Fearful) anxious am I, the Little Child, distressed and steeped in difficulties; always (will I) steady (?) the Former

8. Kings." The King said: "Now, I diligently comply with the Former Kings' Mandate and command you to assist my States and

9. my Family, within and without. Devote your full attention to (?) the lesser and the greater regulations. Make secure my Throne;

... ... those above and those below,
(those whom I) approve (and those whom I) disapprove

10. throughout the Four Quarters (of the Kingdom).

Death do not move I, the One Man, on the throne. Great is your wisdom. I

11. neither .... nor .... You must not dare to remain in idle repose; respectfully from morning to evening be considerate of me, the One Man.

12. Harmonize the lesser and greater plans of my States. Do not .... .... to proclaim (to)
I, the Former Kings', accord, virtue. Therefore

13. look up to August Heaven and enlarge upon (?) the Great Mandate; peacefully assist the Four Countries. Would that I do not act

14. (contrary to) the Former Kings', ...." The King said: "Fu-Yin, to, it, common. Give out and bring back (reports on my decrees); attend to (my) affairs abroad; extend (my) decrees and (my)

15, regulations. Exact the lesser and greater expected contributions. (If) there are no correct reports (?), great may be kingly wisdom, then this

16. will ruin my Countries. From now onwards give out and bring back (reports); extend the decrees abroad. It is not

17. the first (of my) ordinances (to you), Fu-Yin. Fu-Yin, despatch the decrees; do not again dare to devote your full attention (!) in extending the decrees abroad." The King

18. said: "Fu-Yin. Now I enlarge upon the Former Kings' Mandate and command you to (extreme, one, region) concentrate on uniting the
Regions (?). ....

19. my States and my Family. Do not .... to the Regulations; do not obstruct or interfere illegally with (?) the common peoples' stores; do not dare to demand bribes (?) and thus oppress the distressed and the resourceless. Carefully imitate your associate Governors. Do not dare to indulge in liquor; you must not dare to fail in your submission. Enlarge upon (!) morning to evening respectfully keep in mind kingly

20. (awe=) dignity (?). Not award. You must not not follow and employ the Former Kings' creation of the brilliant laws. Would that you not have your Sovereign fall into difficulties."

The King said: "Fu-Yin, (I have) already spoken to these (officers:)

21. the Ch'ing-Shih-Liao, the Ta-Shih-Liao, and the Fu-Tsiah-Yin. (I) command you to control and administer the Kung-

22. Tsu and the Ts'an-Yu-Shih, the Hsiao-Tsu, the
Shih-Shih, the Hu-Shen, and my Chih-Shih.

26. Let your clansmen shield my royal person.

Accept (these) articles - thirty items:

(I) award you:

(a) a flask of herb flavoured spirits made from black millet,

27. (b) a Ku-er-ladle,

(c) a jade libation handle,

(d) red kneecaps,

(e) an onion-green gem (for girdle pendant),

(f) a jade circle,

(g) a jade ..., 

(h) a metal covered chariot,

(i) an ornamented silk net for placing around the protruding rails of the upper part of the chariot box,

28. (j) leather trappings lacquered in red,

(k) a cover with tiger designs and black interior,

(l) the right-hand portion of a leather yoke,

(m) leather strap with designs,

(n) ornamented hub-caps,

29. (o) a large metal bell,

(p) a cross-piece for chariot shaft,

(q) a metal enclosed portion of shaft to
carry the cross-piece on which the chariot box rests,
(r) a metal figurine (?),
(s) .... ....,
(t) a metal vessel,
(u) a fish-patterned mesh,
30. (v) horses - four,
(w) metal ornamented reins
(x) metal ....,
(y) metal ....,
(z) red banners - two.
(I also) award you these ....
31. Employ (these benefices in) sacrificial (?)
and in lay affairs. ¹¹ Mao-Kung-Yin responded
and extolled the Son of Heaven's august
grace; therefore made (this) honoured Ting-
vessel. May descendants forever preciously
employ (it).¹

The Vessel.

The Mao Kung Ting is the best known and one of the most

¹. The translation follows the commentaries of Wang Kuo-wei and
Kuo Mo-jo for the greater part. Other studies have been con-
sulted also. Some of the interpretation is entirely our own -
based upon character usages in other inscriptions. Where the
meaning of certain character groups cannot be solved, the indi-
vidual characters are simply rendered in the normal sense they
obtain in the inscriptions; such meaningless groups of charac-
ters will be discussed later in the commentary following.
highly venerated ritual vessels of the type generally ascribed to the Western Chou period; its inscription of 488 characters forms one of the longest texts recorded in the great repositories and is almost paralleled in length only by the Ch' i Hou Pu Chung inscription in the Sung Catalogues, and exceeded only by that of the spurious Tsin Hou P'an (the Bushell Bowl, at present lodged in the British Museum, containing 538 characters). It is a veritable giant amongst the famous inscribed vessels that first appeared in catalogues in the early 19th century; with the San Shih P'an (ins. T.349.1), the Ta Yu Ting (ins. T.285.1), the Shao Yu Ting (ins. T.405.1), the Hu Ting (ins. T.395.1), etc. it ranks foremost in the minds of scholars as one of the most important documents yet discovered that not only increases our understanding of early feudal China, but also proves beyond doubt the reliability of the 'authentic' chapters of the Shu Ching. There is available, a large body of litera-

2. There is some difference of opinion as to the exact number of characters in the inscription; this is due to variations of counting in respect to compounded and repeated characters. The total of 488 is that of actual characters; 竺, 多, 等, etc. being regarded as single characters and the repetition mark 重复 being disregarded. One character which only partially appears and another which completely disappeared during the production of the vessel are included in the number. The serial number count of 500 characters is, however, maintained.

3. In numbers of recent general histories of China, e.g. Lü Chen-yü's Chung kuo sha hui shih kang, Chien Fo-tsan's Chung kuo shih kang, Ying T'ung-tsu's Chung kuo feng chien she hui, etc., appear constant references to the contents of the bronze inscriptions amongst which the Mao Kung Ting plays a not inconsiderable part. In his admirable Studies in Early Chinese Culture, H. G.
ture scattered throughout a number of catalogues, general works on inscriptions, and bulletins, presenting a variety of views and many apparently well-considered opinions on various aspects of this famous text. Indeed, so numerous and various are the researches made on the inscription that it is not difficult to agree with Kuo Mo-jo's remark that:

'The Mao Kung Ting, which name is almost a household word, has, since its discovery, had no lack of people who have studied and made interpretations of it.' (Chin wen ts'ung k'ao, 8/125).

Several of China's greatest scholars have pondered on the problems of interpretation and chronology of the Mao Kung Ting, and as far as the interpretation of the text is concerned there is a certain amount of agreement. Large portions of the text have 'parallels' in the traditional literature: individual characters and phrases abound with examples of similar usage in the traditional texts and other bronze inscriptions. Thus there is a tendency towards a general interpretation followed by most scholars of at least 60% of the inscription. Nearly forty years ago Wang Kuo-wei wrote in the introductory section of his Mao

3. Creel seems to accept 13 chapters of the chin wen text of the Shu 'which we can be sure are both early and genuine' (p. 111) and bases his opinion upon comparisons with Western Chou style inscriptions in assessing these chapters as contemporaneous documents. Other Western scholars have also sought to support their studies of the reliability of the Shu chapters on the basis of similarities in the inscription texts.
Kung ting ming k'ao shih:

Hsu T'ung-po was first to give an interpretation (of the text of) this vessel and has the merit of being a pioneer; Wu Shih-fen was cautious in his approach; Sun Yi-jang took a broad view (of the problems of the text); Wu Ta-ch'eng delved more deeply in determining the meaning of the archaic characters; thus the characters in this vessel that are readable amount to almost 80 or 90%! (see Collected Works, vol. 16).

So valuable a document, manifesting little difficulty in the decipherment of the archaic script and, on the whole, presenting a context with few problems of interpretation, has excited the emotions of many recent scholars; it has gained a reverence far exceeding its historical value and even its name is often spoken in bated breath and in solemn tones. In a recently published study of the inscription Tung Tso-pin states:

'The Mao Kung Ting is veritably a national treasure .... the vessel's shape is ordinary, its decorative pattern is simple; neither of these is seen to be unusual - what is re-

4. In the original text Wang employs the literary names of these scholars, we have used their ming by which they are best known: Hsu T'ung-po compiled the Ta'ung ku t'ang k'uan chih hsüeh; Sun Yi-yang wrote a study of the Mao Kung Ting text in his Chou kao shu lin; Wu Shih-fen compiled the Shih ku lu chin wen, Wu Ta-ch'eng compiled the Ch'ia chai chi ku lu. In each of the catalogues, transcriptions and commentaries on the inscription are presented. Since Wang Kuo-wei wrote this passage several other studies have been published and will be referred to later.
Plate 5. The Mao Kung Ting (ins. T.500.1).
'Marked by the text within the vessel—lofty and mystic, chaotic but profound, steeped in elegance, high in antiquity, extensive and eternal—it is five hundred characters in length.' (Ta lu tsa chi, 5.8, p. 257).

Well might one engage in rapturous exclamations of delight at the existence of so long a document embodying so many details of Western Chou culture; that a vessel of unpretentious design should contain such a magnificent inscription has added much to the prestige of both the text and the vessel.

The Mao Kung Ting is quite an impressive article and it is not at all surprising that it has gained the highest regard of scholars and collectors. It is not, however, a beautiful object and contains very little of the green shades of patina which are the delight of both Chinese and Western collectors; its shape is slightly imperfect and viewed from one angle appears somewhat awry. The workmanship is very roughly executed, even in the simple border design below the rim of the vessel; mould joins protrude in several places and in the bottom portion of the vessel and along the edges of the legs no attempt was made to smooth them away. Large areas of the vessel appear almost brand-new—the metal exhibiting little effect of aging. This is particularly evident in the vessel interior where the inscription area is practically unaffected by corrosion; small pit-marks may be
noted but the coarse effect suggested by rubbings is a feature of the original cast metal surface and only to a minor extent has patination contributed to this coarseness; the greatest degree of corrosion is to be observed on the lower portions of the legs. In various places cavities appear - some nearly 1/4 in depth - in the outside surface of the vessel; in the interior surface there are one or two such cavities also. They are too deep and erratically spaced to be attributed to corrosion; they are certainly not the result of drilling or of rough handling of the vessel - they are, we believe, features of imperfect casting. The Mao Kung Ting is a large and heavy vessel, requiring two men to move it easily; the casting of so heavy and huge an object in one operation would necessitate more than ordinary skill on the part of the bronze founders. The job appears to have been done imperfectly, and the cavities are typical of those caused by airholes or slag-holes during the pouring of the molten metal into the mould. Two large cracks cutting deeply into the sides of the vessel are further evidence of faulty casting.

Imperfections in the process of casting are to be observed in the text area - several characters are incomplete through damage to the mould sections containing the inscription: [assembly]

; one character has only the stroke \; while another is completely obliterated.
Plate 6. The inscription area of the Mao Kung Ting.
erated. These features have resulted from careless handling of the mould sections wherein the mirror-reversed relievo script was knocked and parts of the characters fell away, leaving only the flat surface of the clay mould. The resulting bronze vessel has recorded the accident but neither the vessel-owner nor the craftsmen engaged in its manufacture apparently were aware of the omission; that they were satisfied with the low quality of the casting is obvious from the fact that the vessel still exists. Yet we might reasonably expect that a much higher standard of manufacture would have been required by the feudal princes as evidenced, for instance, in the following quotation from the Ḫish-lung section of the Li chi:

In this (first) month (of winter) orders are given to the chief Director of works to prepare a memorial on the work of the artificers; setting forth especially the

5. In preparing the mould, a model of the vessel was first made (probably of clay or wax) incorporating on the outer surface the decor and on the inner surface the engraved text of the inscription. From this model the mould sections were built up; the core of the mould contained the inscription text in the form of relievo characters reversed mirror-fashion. When the mould sections and core were assembled together and other necessary preparations completed, molten bronze was poured in and the final vessel resulted. Now, as the inscription characters in the mould core were standing out in relief careless handling of the sections before assembly would easily result in damage to the relievo characters. Such accidents could have happened 3000 years ago during casting of similar vessels just as easily as in the case of the Mao Kung Ting, cast over a century ago; there is, however, no example of a fully attested inscribed bronze exhibiting such carelessness in the text area.
sacrificial vessels with the measures and capacities (of them and all others), and seeing that there be no licentious ingenuity in the workmanship which might introduce an element of dissipation into the minds of superiors; and making the suitability of the article the first consideration. Every article should have its maker's name engraved on it, for the determination of its genuineness. When the production is not what it ought to be, the artificer should be held guilty and an end be thus put to deception. (IV. IV. I. 17, Legge's translation, p. 299).

Although a Han period compilation, the passage no doubt records accurately enough the attitude towards poor workmanship that must have existed even in earlier times; the high quality of craftsmanship in scientifically excavated articles in bronze and other materials further suggests the existence of a general requirement of high standards of workmanship throughout the Shang, Chou and Chan Kuo periods. Poor quality of production is, of course, no criterion of forgery; for it may well be possible that inferior articles sometimes resulted and, for some reason or other, were not destroyed or remelted.

Seldom are we fortunate enough to possess details of the provenance of the bronze vessels, in the great majority of cases nothing is recorded at all; a few inscribed vessels are accompanied by vague testimony to the effect that the vessel was unearthed at Loyang or some such locality, but the
testimony itself evinces no proof of its reliability. This lack of acceptable testimony and the usual lack of concern on the part of Chinese scholars in regard to such matters is a feature in Chin Shih Hsüeh familiar to all students of the bronze inscriptions. The Mao Kung Ting is no exception. In K’o Ch’ang-ch’i’s Chin wen fen yi pien the only information given reads:

'It was unearthed in Chi Shan in the last years of the reign of Tao Kuang.'

This is possibly based on a short note written by Ch’en 6. Chieh-ch’i on a rubbing of the inscription; in a short article recently published in the Ta lu tsa chih nearly all the available information on the earlier history of the vessel is brought together by T’an Tan-shang; the first half of his compilation is of particular interest:

'The Mao Kung Ting has two lugs and three legs; the height of the vessel including the lugs is 53.8 cms., its diameter 47.9 cms., its weight 34,705 gms. The rim of the vessel is ornamented with a heavily patterned band, within the body of the vessel are thirty-two lines of inscribed text in two parts, each containing sixteen lines. Rubbings when arranged side by

6. See Ch’en Meng-chia, Hai chou t’ung ch’i tuan tai (1), K’ao ku hsüeh pao No. 9, p. 151, 1953; Ch’en refers to a rubbing with exactly the same wording as that of K’o Ch’ang-ch’i. The writing is that of Ch’en Chieh-ch’i.
side form two boot-shaped pieces and
a space is left in the very centre.
The whole body of the vessel has a
deep brown colour with (vestiges of)
green patina. It is now preserved in
the National Central Museum and bears
the number J.W.T. 101-39.

This Ting-vessel was unearthed in
the last years of Tao Kuang in Chi Shan
Hsien, Shensi Province. In the second
year of Hsien Feng (1853), a dealer
named Su Yi-nien, brought it into the
capital. At that time Chi'en Chieh-ch'i
had an official post there; he purchased
it for a considerable sum of money and
transported it back to his home in Wei
Hsien in Shantung. He hid it and showed
the vessel to no one but only sold rubbings
of the inscription at extremely high prices.
However, the Mao Kung Ting was ardently
desired by powerful persons interested in
it and during the period of Hsuan T'ung
it finally passed into the hands of Tuan
Fang. 7.

After this there was a number of
changes of ownership; at one time an
American named Simplin (?) tried to ob-
tain the vessel offering as much as
$50,000; the price rose higher and higher
and in the end it was impossible for even

7. L. C. Hopkins has recorded a few details of interest that
might be noted here:
'There exists a celebrated bronze antique known to Chinese
connoisseurs and others as the Mao Kung Ting, or Cauldron of
Duke Mao. This was formerly in the possession of a wealthy
family of Shantung Province named Chi'en, from whom it was pur-
chased less than two years ago by the late-regretted ex-Viceroy
Tuan Fang, for the sum of ten thousand taels, say £1,500. But
this figure was a reduced one in consideration of the distinction
and particular attainments of the buyer. Fifteen thousand taels
had previously been offered and refused for the same specimen.'
(The Chinese Bronze known as the 'Bushell Bowl' and its Inscrip-
tion, J.R.A.S. 1912, pp. 439-77.)
Its later adventures need not concern us here but it may be noted that T'an has not incorporated all accounts of its recent history; numerous anecdotes exist which could form a most interesting story if collected together, including even such minor details as one recounted to us by a scholar in Formosa who stated that he had slept with the Mao Kung Ting hidden under his bed during several months of the war period.

As far as the early history of the vessel is concerned, we know nothing more than the details already quoted. The testimony available is far less reliable, for instance, than that which accompanied the 'discovery' of the Piltdown forgery which has lately been exposed, and it is not to be expected that documentation of the event which took place in China over a century ago will be easily found. We know the

8. We have only recently read Dr. Weiner's interesting account of the research undertaken to determine the reliability of the Piltdown finds. In some respects the general problems facing the investigators were akin to those considered by us in this paper: no proper testimony existed, the general acceptance of the find was based on the prestige of the 'discoverer' and the opinions of other scientists who had no reason to suspect the duplicity of Dawson. There were sceptics who considered the cranium and jaw could not have originated from the same animal, but on the basis of later excavated fossil remains exhibiting similar characteristics from a nearby site, dissenters changed their opinions. The scientific study of man's origin was one only a few decades in age and at the time of the hoax not a great deal was known; the general characteristics of the ape-man's head fitted the current 'missing link' expectations particularly well. In the case of the
name of the dealer who first sold the vessel and we know something about its first owner who, for some reason, was unwilling to allow others to examine the main attraction of his large collection of bronzes. Thus because of its rather checkered history it would not be unreasonable to suspect that the inscribed vessel which we viewed in Tai Chung might indeed be a forgery - a spurious copy of the original article whose whereabouts may not now be known. The ingenuity of Chinese forgers is perhaps best illustrated in respect to their skilful production of the Chia Yi (ins. 71,2); could they not have reproduced a second Mao Kung Ting? It is known that forged rubbings of the Mao Kung Ting inscription have been made.

8. Mao Kung Ting and many other inscribed bronzes the stage was similarly set - the knowledge of Chin Shih Hsüeh was still in its infancy; the inscribed object was, according to current opinion, the type of article that should result from excavation; there was the sceptic Chang Chih-tang whose opinion had no weight against that of the growing numbers of scholars in this field; prestige and ineffective research resulted in the general acceptance of the vessel. Enthusiasm and gullibility marched hand in hand.

9. We have seen no such forgery but repeat here a statement made to us by a dealer in books and objects pertaining to calligraphy. It is quite possible that his statement is correct for it would not be too difficult a task to engrave a stone surface with the Mao Kung Ting (or any other inscription) text from which rubbings might be taken. In the case of the Mao Kung Ting this dishonest practice may have taken place during the long period of Ch'ien Chieh-ch'i's ownership when he sold rubbings at high prices.
two copies of the San Shih T' an vessel are in existence; numerous such examples might be cited but these are sufficient to illustrate how necessary it is to be absolutely certain that we are indeed studying the same vessel purchased by Ch' en in the early 1850's. Luckily the problem is easily solved for there are in existence numbers of early original rubbings bearing the seal of Ch' en Chieh-ch'i, and a few with his own handwritten remarks added. Every reproduction of the inscription we have seen in the best repositories and also several original rubbings, all tally perfectly with the text area of the original vessel. At the conclusion of his article T'an Tan-shang states:

'Classical scholars have given expert evidence that, on the basis of its decoration, its inscription, and all kinds of special characteristics together with a close comparison with rubbings published by various collectors, it tallies perfectly and entirely; it is definitely the real vessel without the slightest shadow of doubt ....' (op. cit., f. 9, p. 25)

Chinese scholars and one or two Western scholars have devoted a great deal of effort towards a chronological classification of the bronze vessels and as regards the Kao Kung Ting two general schools of thought prevail: (a) the Ch' eng Wang group including such scholars as Hsi T' ung-po, Wu Ta- ch' eng, Wu Ch'i-ch'ang, Tung Tso-pin, etc. and (b) the Hsüan
Wang group whose foremost advocate is Kuo Mo-jo followed by Jung Keng, B. Karlgren and others. We shall not concern ourselves with the arguments of each group for our own attitude is this: it is necessary to determine the authenticity of the vessel and its text first before embarking upon what may result in a fruitless survey. There are a few observations which must, nevertheless, be considered; according to Karlgren's classification the vessel is Middle Chou style, the inscription according to the Esman Wang group's dating is thus appropriate for the vessel. No one can seriously accept the earlier dating of the inscription. On the face of it the Mao Kung Ting has in its favour the fact that both the vessel-type and decor, and the inscription, are concurrent features of the Middle Chou period. But this is not sufficient proof of its authenticity. In the earliest illustrated catalogue, the K'ao ku Catalogue, there is a vessel somewhat similar to 10. The Ch'eng Wang group's main argument in the earlier dating of the vessel is based on a quite unacceptable assertion that the Wen Hou Chih Ming chapter of the Shu is also to be dated in this King's reign; Wu Ch'i-ch'ang has been foremost in pressing this view, and because of the marked general similarity of the Mao Kung Ting text with the traditional example, it, too, must be of similar age. The real basis of the argument, however, seems to be something more nebulous - so fine an inscription can only date from the early reigns when the Golden Age of the Chou Dynasty was at its zenith; it is hardly possible that such a marvellous object would have been manufactured when the dynasty was tottering on the brink of decentralisation and disorder that was to characterise the second half of the Western Chou period.
the Mao Kung Ting - 'curved legs' (Karlgren's no. 49) and 'scale band' decor (Karlgren's no. 55) - but it lacks lugs and the body shape differs towards the mouth of the vessel (1/12a). In the later Po ku Catalogue another vessel with the same inscription as the preceding one (but incorporating an additional 'clansign') and with lugs, is reproduced (3/23a). The decor elements of the 'scale band' vary slightly. Neither vessel is attested. The Po ku Catalogue has no other example of a Ting-vessel closer in appearance to the Mao Kung Ting than the lug-less vessel above; there are, however, a number of vessels containing the same 'scale band' decor: four Tui type (3/13a, 3/17a, 3/21a, and 3/24a) the last two being particularly close to the Mao Kung Ting form; one Kuei type (3/36a), one Fu type (3/40a), two Yi type (6/4a, 6/5a), and one bell (7/13a). The elements of the 'scale bands' differ slightly in several cases.

The Po ku Catalogue, however, contains a number of Ting-vessels very close indeed to the Mao Kung Ting: 2/10a, 3/16a, 3/20a, 3/23a (noted above), 3/27a, and 5/24a; the first of these is almost absolutely identical. There is a total of 7 Ting vessels with 'curved legs' and the 'scale band' decor in the two Sung Catalogues. In every case the 'scale band' pattern points to the left i.e.  → ; in other vessel-types the same band pattern
Plate 7. The Mao Kung Ting inscri
is found pointing either to the right or to the left, the latter being most common. In the Hsi ch'ing Catalogue and its two supplements are 13 vessels similar to the Mao Kung Ting, and of these 4 have the 'scale band' pattern pointing to the left while 9 point to the right! It is not proposed to make any profound statement regarding these observations—none of the vessels possesses any testimony, but there remains this unusual difference between the two catalogue groups in respect to the 'scale band' decor in Ting vessels. We merely remark upon what is essentially a rather suspicious feature and suggest here that although Karlgren's classification of the Mao Kung Ting type of vessel may be correctly attributed to the Middle Chou period, there is no reason to believe that the 20 vessels noted above (and the Mao Kung Ting) are all necessarily genuine because they fit into this classification.

This seems to be one of the dangers of group classification, particularly when the majority of the materials employed were 'discovered' at times when forgery was rife and the vessels concerned lack testimony. Whether the Sung Catalogue vessels noted above were genuine or not, need not concern us at the moment; the problem is upon what basis are the 14 early Ch'ing Catalogue vessels acceptable as authentic articles? They all lack acceptable testimony and although the decor, vessel-type, and inscriptions are characteristic of Middle Chou, there is no reason to believe that forgers were not capable of having manufactured several or even all of them upon the basis of the Sung Catalogue illustrations. Jung Keng has illustrated the extent of forgeries made in imitation of the Sung Catalogue Illustrations (see p. 45) in the 18th century and the standard of craftsmanship of the faked vessels was indeed very high; the same forgers would
The vessel-type is simple in shape and decor; if a forger intended to produce a vessel with an unusually long inscription, no better type could be chosen. The Sung Catalogue illustrations alone exhibit all the necessary features that he would require to consult in planning the vessel and decor; as to the inscription he would have as a guide the Shih P'ei Kuei (ins. S.204,1) which, with its marked similarity to the Wen Hou Chih Ming chapter of the Shu Ching together with the numerous phrases that might also be incorporated from other long inscriptions in the Sung Catalogues, would soon be re-composed into a document of considerable length and of quite authentic appearance.

The 'scale band' decor of the various vessels consulted above does not appear in any fully attested bronze vessel illustrated in the numbers of archaeological journals and other publications received to date. Many scores of vessels are available to us in illustration, but the vast quantities that have been unearthed recently may later prove this comment to be valueless; however, it is equally interesting to

11. have had little difficulty in producing the style of vessel under discussion. The stylistic criteria do not offer any definite proof of authenticity, they merely suggest the period in which vessels of this type may be allocated; the Mao Kung Ting was made by a forger who knew the stylistic requirements that would suit the inscription-type he planned to engrave.

12. A few remarks regarding style and decor of the bronze vessels will be made from time to time, but we avoid hazarding any definite opinions at this stage of the research. The tre-
Fig. 11. Character arrangement in the Mao Kung Ting.
note that a rather large number of vessels incorporating this 'scale band' decor contain inscriptions exhibiting inconstancy as well as several of the suspect features of forgery later to be discussed.

The Inscription.

Rubbings of the Mao Kung Ting inscription result in a peculiar shape owing in part to the curvature of the inner vessel surface being reproduced as a plane surface. The text is divided into two sections each consisting of 16 lines of characters; the character numbers in each line vary considerably as illustrated in the figure opposite. So lackadaisical an arrangement is a feature that one would hardly expect to obtain in a long text written by a Chou period scribe; even the forger of the Tsin Hou P'an inscription was able to maintain a reasonably artistic arrangement of his characters, engraving them in rows of equal numbers and each character of equal size. Karlgren's description of the Mao Kung Ting script might more appropriately be applied to the Tsin Hou P'an, but hardly to the

12. mendous increase in archaeological discoveries of the last few years will certainly require a completely new approach to problems in this field. Already scholars in China are turning their attention to the excavated materials and are tending to work solely with these. With so many artifacts whose provenance is fully attested and recorded, scholars are certainly well advised to examine the new material thoroughly before returning again to the old whose authenticity may then better be assessed on the basis of reliable stylistic criteria. Only in this way can stylistic criteria be developed which may be directed towards the determination of spurious manufactures.
'To us it is obvious, from the script type, that the early part of the dynasty is excluded. The lines are very regular, the characters of equal size, well-balanced and neatly drawn, with gracefully curved lines - a typically advanced script; ....'(Yin and Chou, p. 50).

In actual fact the lines are not regular, either in numbers of characters or in length; many of the characters are badly balanced, numbers cannot be described as 'neatly drawn' and those illustrated here are certainly not of equal size (Fig. ...).

No doubt the perfection he appears to see in this text is about the standard of script that must have obtained in the second half of Western Chou; the Mao Kung Ting, however, does not exhibit so fine a standard.

To people unversed in the writing of archaic Chinese script it would not always be an easy matter to maintain a constant size of character when engraving a long text containing simple as well as complex characters. There would be a tendency to maintain a constant size in cases of one or two-element characters, or of those with very simple elements in greater numbers, but as soon as a highly complex character is required to be written or engraved (particularly one rarely seen or employed by the writer) the resulting copy will more often than not grow to almost twice the size of nearby normal-sized characters.
Fig. 12. Tracings of characters in the Mao Kung Ting inscription illustrating size variation and lack of balance. The appended numerals denote height in mms; sizes vary from 11mms - 31mms. A study of the last line of characters - complicated and simple in structure - exhibits well the incapacity of the scribe to maintain a natural uniformity of size.
Nearly every Western student of Chinese has had this experience especially in the early stages of his study and particularly when writing in vertical columns: an unusual character is required to be written - one that the writer has previously employed only once or twice and cannot render accurately from memory - it is copied carefully with due attention to stroke details. When completed, how enormous and unbalanced it appears amongst the neighbouring characters which flowed more evenly from his pen! This is precisely what has happened in the Mao Kung Ting script and is fully apparent when individual characters are carefully compared. The tracings placed opposite illustrate the fact that while compiling the archaic text the writer was consciously building up characters in the case of complex ones; simpler characters vary considerably in size and although it would be expected that they would be written somewhat smaller than the complex forms, the variations are such that it is perfectly obvious that the writer was quite inexperienced in archaic calligraphy.

There are several good reproductions of the inscription that may be consulted for detailed study: Wu Shih-fen's handcopy (Chün ku Catalogue) is particularly useful and quite accurate in most minor details. However, it is as well to check his drawings against reproductions of rubbings. Those incorporated in the T'ü lu Catalogue and the San t'ai Catalogue are reas-
onably clear; our own observations were made on the basis of the original inscription, original rubbings, and the above catalogue reproductions in the early stages of the study, and have been further checked from a photograph of a recent rubbing taken from the vessel in Formosa which is the best copy yet made. A very clear handcopy appears in Feng Ju-ch’ien’s Feng shih chin wen yen p’ao, a most beautifully printed book containing stone-engraved handcopies of numerous bronze inscriptions, all executed with remarkable care by the author. In the case of the Mao Kung Ting copy, however, there are one or two slight errors. Tung Tso-pin has published a handcopy (Ta lu tsa chih, 5.9, separately printed sheet) which is artistically drawn but suffers from several mistakes in character detail.

Character structures in the Mao Kung Ting are inconstant, and amongst the giant texts of Western Chou style it is one of the most extreme cases in this respect. It is, however, a most valuable document for the study of inconstancy and illustrates well the nature of this aspect of forgery. The following analysis of the element 佳 is done in greater detail than was possible in Table I:

13. The photograph of this rubbing and also one of the vessel was kindly sent to us by Mr. Chou Fa-kao of the Academia Sinica; unlike all earlier reproduced rubbings this recent one is carefully mounted to simulate the appearance of the inscription within the vessel.
Strokes (a) and (b) should be a continuous curved stroke, but in this case they were made as two separate strokes—this is quite clear in rubbings and in the original text there is not the least doubt; (d) is a straight line and does not curve where it cuts (a) and (b). Line (e) cuts slightly through line (d) into the 'head' of the character. It is not easy to decide whether (e) continues to form stroke (c) or if stroke (c) is a continuation of curve (b); if it is the former, then stroke (f) would be the continuation of the curved stroke (b).

Curve (a) is continuous but does not form the 'tail' which is a separate stroke (b); the tail in this case contains no 'fea-
ther' strokes at all. Line (c) is a bent line rather than two separate strokes forming the lower part of the 'head' and the upper part of the 'wings'; the bend occurs where this line cuts the curved line (a).

(3) 集 (line 4)

Curve (b) has no connection with (a) but forms one of the five horizontal strokes of the character; it continues to form stroke (f). Curve (a) continues to become part of line (e), it does not, however, complete the process, and line (e) is newly cut as a separate stroke starting at the horizontal line (g) - where it cuts the curve (b) - (f) it bends slightly to continue and form the 'tail' (c). The present form has five horizontal strokes as compared with the preceding which has four; its fifth stroke is one situated on the tail stroke - this contrasts with a later structure which has two 'feather' strokes.
The curves (a) and (b) are broken by the straight horizontal line (d); curve (b) continues to form the third horizontal line (f); the tail (c) is a separate stroke and has one 'feather' stroke. (e) is separated a fair distance from the curve (b). This is actually the case in the bronze text itself and has no relationship with patina or the quality of the rubbings—undisturbed metal exists in this space.

It is somewhat debatable whether this character should be included here but other inscription forms are founded on the "佳" element. The present form has something in common with this
element. Little further comment is necessary.

(6) 懤 (line 7)

The upper strokes are similar to the structure of this element in the character 集 (3) and it might be thought that the structural variations which are analysed in this section may have some connection with the composition of the character. That this is definitely not the case can be judged from the many variations in the several characters 唯 and also in such characters as 零；先，我 etc., which are discussed later. It is purely coincidental that the complex combinations 集 and 蹈 have 己 constructed on almost similar structural principles. Although there is some doubt regarding the nature of the tail section of one or two of the 己 elements, the present character definitely has stroke (b) as a continuous curve.
Curves (a) and (b) are not continuous and are broken by the bent-line (c); (b) continues to form the tail upon which are placed two 'feather' strokes. In the text this character is situated immediately beside the character 走 which we have just studied and thus illustrates well the forger's carelessness in allowing adjacent characters to be written with varying structures.

Curve (b) cuts slightly through the straight horizontal line (c) as shown in the enlarged drawing at the right; in most
rubbings it is just discernible, but in the original bronze text it is clearly seen. Line (e) appears to be either bent or slightly broken where it crosses line (f).

\[ (9) \quad (\text{line 12}) \]

\[ \begin{array}{c}
\text{a.}
\end{array} \]

The curve (a) is a continuous line; (b) and (c) are incompletely written as shown in the drawing above, the blank portions appear as pristine metal and are not in the least the result of patina clogging the incisions or of careless cleaning of text area. The strokes may not have been completely incised in the vessel model before the mould was made - they certainly did not appear in the mould.

\[ (10) \quad (\text{line 15}) \]

\[ \begin{array}{c}
\text{a.}
\end{array} \]
The whole of curve (a) appears to be a continuous line but the tail portion is not perfectly clear, one way or the other, in the original bronze.

(11) 唯 (line 15)

In rubbings which we had formerly consulted there appeared to be a suggestion of a third 'feather' stroke, thus totalling six horizontal strokes in all, but there is no evidence of this in the bronze text itself. The present form is the 'normally' written one.

(12) 唯 (line 16)

The character is not fully drawn, we might note only the number of horizontal strokes - five.
This character is incompletely engraved.

There is no sign at all of a vertical stroke as in the other examples; it is to be noticed, too, that the element
appearing in the first example of this character is omitted in the present case.

(17)  

Of these 16 cases of the \text{佳} element, two are somewhat illegible for analysis but the remaining 14 exhibit a considerable variety of structural forms. They may be systematically tabulated as follows, thus illustrating further the ignorance of the writer of fundamental characteristics of the archaic script:

I.  

\begin{itemize}
  \item \text{a group of five characters constructed on a variation of a continuous (long-curve)}:
  \item \text{with straight stroke (a); two 'body' strokes and one 'feather' stroke.}
  \item \text{as for preceding but with incompletely engraved 'body strokes.}
\end{itemize}
II. a group of two characters constructed on a broken long-curve:

(a) with straight line (a) and two 'body' strokes, one 'feather' stroke.

(b) with bent line (a), two 'body' strokes, and two 'feather' strokes.

III. a group of three characters of various structures with the common characteristic of a 'separate-stroke-tail'.

(c) with slightly curved stroke (a); two 'body' strokes and one 'feather' stroke; but no vertical stroke.

(d) with straight stroke (a); two 'body' strokes and two 'feather' strokes.

(e) with bent stroke (a); three 'body' strokes and one 'feather' stroke.
IV.

A group of two characters with broken curve and two strokes at (a).

(a) continuous curve; bent line (a); no 'feather' stroke.

(b) broken curve; straight line (a); one 'feather' stroke.

(c) broken curve; straight line (a); one 'feather' stroke; in this case the 'separate-stroke-tail' is not absolutely certain. Should it not be interpreted as this stroke then it becomes a further variety of Group II.

(a) two 'body' strokes; one 'feather' stroke.

Because of the 'separate-stroke-tail' it might also be classified in the previous section.

(b) one 'body' stroke and one 'feather' stroke.
v. In this group we would place the character 鬼, which in its occurrence in all other texts contains the 鬼 element; however, although its structure is obviously related to this element in the Mao Kung Ting, its shape is so unusual that it is best left in a classification of its own.

Fourteen cases of 鬼 have been carefully copied from rubbings of the Mao Kung Ting (most doubtful cases checked against the actual inscription itself) and have been analysed in some detail. Thirteen different structural forms have been noted - the differences of structure are of such a kind that there cannot be the slightest doubt that the writer was working in a medium in which he was little experienced. Only a person inexperienced in writing in the archaic script could make so many structural errors as these. His errors are not limited to this one element but are to be noted in several other characters:

鬼 occurs ten times in the text and possesses almost as many variations of structure:

(line 2)

the lower stroke (a) has no right to be part of this character at all, but it is certainly in the inscription and is definitely written as part of this character. The area (b) is a hopeless confusion of meaningless strokes.
the right-hand element of \( \text{\`} \) is written in archaic characters as \( \text{\`} \); the stroke (a) should always appear above the upper horizontal stroke, not below it as in the two cases just studied. the form here is correctly written.

again the structure is correct but a slight awkwardness in shape is evident; the left-hand vertical stroke almost appears as though it is not a continuous line, but this may only be a result of the uneven thickening of the stroke. structure is normal.

in the original bronze this character exhibits some very interesting features. Area (a) was written in this manner:
with the result that the horizontal stroke did not cut through the long curved vertical stroke. The upper stroke joined with it to make both strokes form one long continuation. In area (b) the original text shows clearly an interesting peculiarity:

(z) continues to (x) then proceeds to form the lower cross-stroke, but unlike the other examples this cross-stroke (x) - (y) is bent into an 'M'-like shape. In the rubbings this is not always clear but is easily discerned in the bronze text.

the upper right-hand stroke is omitted; but it may mistakenly be drawn as curved from (a) which appears as a continuation of the lower horizontal line.
this character is not very clear but appears to be constructed correctly.

stroke (a) is misplaced and curved in the wrong direction.

this form is separated from the preceding by only one character; it lacks stroke (a) of the preceding and gives an unusual twist to the lower cross-stroke.

There are a number of other examples which might be noted:

occurs three times with unusual variations, e.g.

In the first case the 'mouth' element is completely missing and was never incised; in the second case the central hand-like element lacks 'fingers'; in the third case the lower stroke (a) is drawn separately away from the centre hand-like element.

occurs nine times with four structural variations:
Of the first form there is only this one example; it is interesting to note that it is the first character in the text; the second form is erratically written in the bottom two strokes; so too, the third form which also lacks one of the upper strokes. The normal structure is of which there are six occurrences.

is written twice: and . Strictly speaking, these are shape differences rather than structural.

which occurs four times has three varieties in structure:

In this form the lower element is written which is a most obvious structural error; in the last form the upper horizontal stroke of the 'rain' element was omitted. Both errors are the only examples of their kind to be found throughout the bronze texts incorporating this character. The two centre forms above are normal in structure.

The element occurs twice with considerable variation in each case:
The 'eye' element was omitted in the second case and the 甲 (甲) element incompletely formed. In the second case the upper element 甲 appears as 甲. In the bronze texts, 事, 史, 史 (in the sense of 使 but never with the 人 element) appear to be freely interchangeable. The archaic form 甲 is transcribed either as 史 (or 使) or 事 according to the context or to the whim of the transcriber; 甲 is usually transcribed as 史. In the Mao Kung Ting there are three cases of the 甲 form, each with a different structure, and one of the 甲 form; the first of the 甲 is used in the sense of 事; the other two and 甲 appear in the titles of officials.

甲 (line 14) 甲 (line 24) 甲 (line 25) 甲 (line 24).

The structural variations of the first two are quite obvious; the third case, however, is particularly interesting - the 'hand' element is almost unrecognizable as such, in the rubbings it appears as a rather bad shape variation rather than structural one; but in the original bronze text it is constructed as shown on the right; (a) should continue to form the dotted curve (c) but it merely joins the shaded vertical line which continues to form (b). It will be noticed, too, that the vertical line in the upper element does not continue to form
the shaded line (b) in the lower element illustrated above, but is broken and (b) becomes a new stroke. There are two examples of 方  both completely at variance with each other in structure; that the first is intended to be 方 is obvious from the context:

方 (line 25)  方 (line 26)

They occur in adjacent lines and are only slightly over one inch apart from each other.

Further variations of structure may be observed but the preceding examples offer more than sufficient proof of the forgery. Several other characters are badly shaped and numbers of identical characters are drawn in varying sizes. A careful study of the variant structures analysed in the preceding pages will make clearly evident to the reader that inconstancy of this kind could not possibly result in the calligraphy of a person fully practised in writing in the archaic script. It is characteristic of the work of an amateur who was almost completely ignorant of the basic structure of the characters; the archaic script was as foreign to him as modern Chinese characters in street scenes are to Western artists who possess no knowledge of the written script. The variations have resulted from the failure of the forger to maintain a constant stroke-order when writing; he was careless,
too, in copying repeated characters even when placed only a short distance away from each other.

In succeeding cases, inconstancy will not be analysed in such detail; it is purposely done here to illustrate the difference between 'shape' and 'structure' so that the two concepts will be fully understood.

The Content of the Inscription.

Although the Nao Kung Ting text reads smoothly in most parts and when rendered into English seems to be reasonably consistent in style, it must be realized that interpretations made of it are largely based on parallel or nearly parallel passages in the traditional texts - in particular, the Shu and the Shih. The first 9 characters, for instance, are exact parallels of the opening lines of the Wen Hou Chih Ming: 'The King spoke thus: Oh (father -) uncle and peace-maker! The greatly illustrious Wen and Wu ....'; the next 6 contain the combination 弘 獨 which occurs otherwise only in ins. S.1480.2, but both characters are found separately in various passages of the Shu and Shih, and with reference to these a suitable interpretation becomes possible. As one proceeds with the study of the text, however, it becomes increasingly evident that the parallels are, in a measure, rather forced and unnatural; especially noticeable is this characteristic
when the Mao Kung Ting text is considered on the basis of the two similar pre-existing texts - the Wen Hou Chih Ming and the Shih P'ei Kuei. There is a definite feeling of doubt and when no less a scholar than Chang Chih-tung remarks upon 'words and sentences gathered confusedly from the Shih and the Shu' it is not difficult to agree with him that the compilation is not all that may be desired, and that it is precisely the sort of document that the anti-ku wen scholars were attempting to weed out from the Shu Ching.\(^{13}\).

That the Mao Kung Ting inscription was compiled on the basis of the two above texts is strongly to be suspected; the Shih P'ei Kuei seems to have been employed as the basic structure to which numerous characters, phrases, and sentences from other sources (or combinations invented by the forger) were added. The Chinese text comparison opposite indicates this possibility quite clearly: at space (a) two sentences were inserted, the first based on ins. S.480.1 (lines 7-8) and the second constructed from traditional examples. In space (b) three sentences culled from traditional sources were then written with slight variations; in the first, the characters 率 and 懷 were selected from the Wen Hou Chih Ming to form a compound verb and after this the 不庭方 phrase from

\(^{13}\) See later reference to Chang's comments, p.166. Henri Maspero's suspicion of the bronze texts for similar reasons has already been noted (p. 167).
the Shih ching (ode 261) was added; the second sentence was made up of 周不 (Wen Hou Chih Ming?) and 文王之耿光 (Li Cheng). From (b) to (c) the forger followed the Shih P'ei Kuei to some extent, but paraphrased a long section. After (c) four sentences were incorporated, the second of these being the bracketed ( 殲天伐恩 ) found later in the Shih P'ei Kuei text while the others are vaguely similar to various parts of other texts - bronze and traditional. Up to this stage the Shih P'ei Kuei has concerned itself with a description of the glorious past where the relationship of Ministers to Kings was as it should have been, and the favour of Heaven was securely invested in the Former Kings. In the next sentence this same description continues, then the King turns his attention to the disorders of the present times. The Mao Kung Ting text, on the contrary, by its early adoption of the 殲天伐恩 sentence turns the meaning to the present disorders and as a consequence, altered the 三方 sentence of the Shih P'ei Kuei text to suit the changed circumstances of the description. From space (d) onwards it pays little attention to the Shih P'ei Kuei text, only following the long section 今令唯 ... 尖猷 ; in space (e), in the middle of this section, are several sentences probably constructed in part by the compiler of the forgery, and in part copied from other texts. The section 恩 ... 尖猷 is a little different in structure from the earlier text, but is
identical in meaning and vocabulary. Space (f) is followed by a very long section in the Mao Kung Ting which is culled from various sources and, on the whole, shows a certain amount of originality in composition. Preceding the benefices, the Mao Kung Ting copies two further sentences from the Shih P'ei Kuei, but reverses their order; in between them is a list of officials. All these titles are to be found in various bronze texts and parallels can be discovered in the traditional texts. The benefices in the Mao Kung Ting commence on the same pattern as the other, but the concluding sentences of the Shih P'ei Kuei text are different; the date section and the incomplete account of the investiture ceremony were omitted for the very good reason that no other recorded text at the time of the 'discovery' of the Mao Kung Ting possessed so unusual a characteristic.

In general then, the Mao Kung Ting follows the first quarter of the Shih P'ei Kuei pretty faithfully, disguising the fact by inserting various sentences in several places. It keeps clear of the central portion of this text and then reverts back to the last quarter of it adopting several sentences, reversing the order of two, and inserting other materials in appropriate places. The last sentence it omits altogether. It will be noted, too, that sections difficult to interpret mainly because of ill-formed and untranscribable characters are left alone - this mainly in the central portion of the text; but in
the long third section, from 亦創 ..., 重政, it has paraphrased the meaning and followed both the Shih Pei Kuei and the similar passage in the Wen Hou Chih Ming.

Nearly half of the benefits of the Mao Kung Ting may be found paralleled in inscriptions that were available to the forger; nos. 1 (ins. S.157.1, S.204.1, S.222.1); 2 (ins. S.204.1); 7 and 8 (ins. S.222.1); 9, 10, 13 (ins. S.222.1, S.171.1); 12, 14, 22, 23 (ins. S.171.1); 26 (ins. S.222.1). Nos. 3, 4, 5, 6, 15, 16, 17, 19, 20, and 21, however, appear only in the Mao Kung Ting and in ins. 138.1, which contains a further 7 of the former's benefits as well as several parallel phrases and sentences in the early half of the text. The Fan Sheng Kuei, ins. 138.1, will later be found determined as a forgery on account of the reversed sun-tzu phrase (p.317); there can be very little doubt that it was compiled on the basis of the Mao Kung Ting, and interestingly enough, it came into the possession of Tuan Fang some time before he successfully purchased the large cauldron from the Ch'en family. Ins. 138.1 is known only in a Kuei-vessel lid, and was first published in the T'ao ch'ai Catalogue. Benefits nos. 18, 24, and 25 are found only in the Mao Kung Ting, thus about half of the articles of benefice appear as terms probably invented by our enterprising forger; several of the archaic characters employed are also new and may be his own creations.

14. The extent to which forgers invented archaic characters will
Like several of the Shu ching chapters the King's speech, which occupies nearly the whole inscription, incorporates admonitory phrases directed towards the investee, Mao Kung Yin. It seems strange that a feudal Prince should incorporate in his inscription text, admonishments that he received from his seigneur; the inscribed vessel was made by the investee to record important happenings for the benefit of his descendants:

"Those ancestors must have had good qualities and also bad. But the idea of an inscription is to make mention of the good qualities and not of the bad ..." (Li Chi, Legge, vol. II, p. 251).

A court scribe might receive orders from the King to record the substance of an investiture ceremony and such contents might be discovered in his records - the inscription on a bronze, however, is an entirely different thing. On the few that are known to be indisputably genuine, only such matters as the achievements and meritorious service of the investee are recorded.¹⁵ In the majority of unattested texts, this is the rule, too.

¹⁴. probably be determinable during the next few years as newly excavated inscriptions are published; it is not a difficult task to create characters that appear both ancient and authentic. New combinations of existing archaic character elements are a particular feature of forgery and where carefully done the deception cannot usually be discovered.

¹⁵. See Section Six.
In the Shu it is always the King about whom the 'plot' of each chapter revolves - he makes speeches and proclamations addressed to one or more persons, and so familiar is this style that the discrepancy of the Mao Kung Ting, with its contents of a royal speech incorporating admonitory phrases directed towards the investee who made the vessel, becomes immediately apparent.

The Mao Kung Ting text is full of Chou time lore and phraseology; from our knowledge of the period as described in the traditional texts, it is exactly the type of text that would be expected to be compiled in those times. It is too much like the traditional texts, and at the same time seeks to present an individuality to offset any suspicions that might be directed against it. To those familiar with the traditional texts, and who are able to approach the Mao Kung Ting text with an open and enquiring mind, the appearance of parallels and discrepancies becomes immediately evident. Chang Chih-tung is the only scholar who has published any comment at variance with general opinion of the vessel's authenticity. While we do not concur with some minor details of his criticism, nevertheless his remarks on the general nature of the text are significant. He notes discrepancies in the archaic characters, words and sentences are gathered confusedly from the Shih and the Shu, and groups of meaningless characters appear; with the tremendous
knowledge of the classics he could bring to bear, together with his experience in the scrutiny of documents and as an assessor of evidence, his highly developed faculty of critical analysis led him to suspect the Mao Kung Ting after merely a few hours' study. The reasons he advances are fundamentally those determined in this paper upon the basis of fully attested inscriptions. He concludes his examination of the inscription with the following remarks:

'Throughout the 500 characters there is no continuity of events, of places, or of persons; it is all conventional phraseology. In ancient times there was no such literary style as this. It is just the sort of thing that Messrs. Mei and Yen reviled in the forged Ancient Text of the Shang Shu ...' (from the extract quoted by Jung Keng, *Shang chou yi chi t'ung k'ao*, p. 213-14).

In the inscription text are several minor features which we believe to be acceptable evidence of fraudulence; the name (or title-name) combination of Fu-Yin is paralleled in only one other inscription (ins. 39.15) which is almost certainly a forgery. Nowhere in the traditional texts does the character 父 precede a proper name of a living person; such combinations as:

(a) Fu-X
(b) X-Fu
(c) Shih-X-Fu, Po-X-Fu, etc.
will be found in traditional and bronze literature of the Chou period. In the first case the character \( X \) is always a cyclical character and refers only to a deceased person; in (b) and (c) various name characters appear in place of \( X \) and the combination refers to a living person. In Wu Ch'i-ch'ang's *Chin wen li shuo su cheng* the nature of \( Fu \) in the names of living and deceased persons may be conveniently studied; when \( Fu \) precedes a name character the latter is always a cyclical character, e.g. \( Fu-Chia \), \( Fu-Yi \), \( Fu-Ping \), etc., (the 'heavenly stems', 天干, only are used). If it were customary to prefix \( Fu \) to an ordinary name character, there would be at least some record of the fact in the traditional texts, and the bronze inscriptions as primary sources would be expected to offer supporting evidence. On the contrary, however, there is not a single example in the traditional texts, and in the bronze literature where the character \( Fu \) is found in many hundreds of combinations, there are only the two exceptions recorded above. In the circumstances ins. 30.15, too, may justifiably be classed as a fake because of the compiler's ignorance of the significance of \( Fu \) as a prefix.

The pronoun 且 and the particle are have fairly well-defined usage in the bronze texts; the latter is employed in all cases (other than in the present inscription) in the sense of 'do not', 'must not' - a prohibitive command. In
line 10 the sentence 'Death do not move I, the One Man, on the throne' is translated in this fashion because of definite misuse of the two characters from the point of view of their usage in archaeological documents. At present, we cannot, of course, be absolutely certain that \( \text{他} \) was invariably employed in the nominative case; in the oracle bones it occurs often and always requires the translation of 'I'; nine bronze texts, however, (ins. T.500.1, S.480.1, T.395.1, T.285.1, S.151.1, T.112.1, 81.2, 72.1 and 66.2) have the character in the position of object thus requiring the translation of 'me', four of these are proved forgeries in this paper, while two are to be strongly suspected as such. It seems quite possible that \( \text{他} \) was indeed restricted to the nominative case; until sufficient authenticated material becomes available to decide the matter, we regard its usage otherwise as a suspect feature.

The character \( \text{母} \), however, occurs in both attested and unattested inscriptions and other than its alternative meaning of 'deceased(?) mother', it always has the sense of 'do not' and precedes a verb; only in the present inscription has this usage become confused. The sentence should read; 

\[
\text{死不童 我 又才立} ; \text{死} \text{是 usually interpreted}
\]

16. The comments on character usage here and elsewhere are merely statistical statements of occurrences in the bronze texts.

17. See Kuan Hsieh-ch'u's Yin hsi chia ku k'o tz'u ti yu fa yen chiu, p. 33.
as 'an impersonator of the dead', but neither this nor 'death' suits the general context here; it is difficult to know what the compiler was attempting to express.

In lines 9 and 17 appears the character 見 (usually transcribed as 見 with the meaning of 出, 'send out', 'despatch'); commentators avoid discussing both occurrences and restrict their study of the character to the second sentence only wherein its combination with 尊 shows clearly that here it is equivalent to 見 (or 見) and the sentence may be interpreted as: 'Fu Yin, despatch the decrees; do not again dare to send out and extend the decrees abroad.'

In our translation the rendering of 'devote your full attention to' is based on Liu Hsin-yüan's suggestion that the character means 傳—; Tung Tso-pin has suggested 見 'confusedly' which is quite appropriate for the second sentence but certainly not for the first. Liu's interpretation and that of Wang Kuo-wei ( 見 above) may be applied in the first sentence but definitely not in the second. Wang's rendering is possibly the best, for the character 尊 with which 見 is

18. Such is the rendering that must result if the Chinese commentators are followed; they do not seem to realize that contradiction results. The text reads: 父君！命命母又 敢越尊命于外.

19. Tung Tso-pin's recent study of the Mao Kung Ting text (Talu tsa chih, 5: 9, pp. 299-305) is particularly useful for its assembly of former scholars' commentaries on various points discussed here.
combined suggests the meaning that should obtain in this unknown character; however, it is immaterial which rendering we adopt, for the two sentences as written in the inscription will not allow identical or similar interpretations of 意 in each case. The first sentence states: 'send out to (!) the lesser and greater regulations'. 于 seems to be redundant; however, in the sentences preceding the second example the King has quite clearly stated: 'From now onwards give out and bring back (reports); extend the decrees abroad', then within the space of half a dozen characters he commands Fu Yin again to 'despatch the decrees', but continues with a contradiction of this - 'do not again dare to send out and extend the decrees abroad'! If the other suggested interpretations are adopted, the contradiction still remains. It has resulted thus either because the compiler forgot the meaning intended for 意 in the first sentence by the time he arrived at line 17 and he carelessly employed the character again in a sentence which as it stands will not read correctly, or possibly it resulted thus because he muddled the early part of the sentence and omitted a necessary double negative: 女母 敢 不 (or 弗): 'you must not dare not to ....' There is an example of similar carelessness in line 22 where the character 敢 was omitted between the characters 母 弗; this is found in two other inscriptions - ins. 129.1 and ins. S.156.1, both
exhibiting inconstancy.

In the Mao Kung Ting are two further cases of characters repeated in contexts in one of which the characters are quite unsuitable: 现 in lines 5 and 7, and 猪 in lines 14 and 21. The first is not a particularly clear-cut example, but the second character which is found in only two other inscriptions (ins. 138.1 and 66.2) is a good illustration of the forger's carelessness. The sentence types in which it occurs are:

ins. 138.1 用饌圈大令
ins. T.500.1 封圈大令
ins. 66.2 用饌圈貟保我邦我家.

The character 饔 is also found in combination with 点 in six inscriptions (ins. S.204.1, S.156.1, S.104.1, 280.1, 123.1 and 121.1) in the following sentence-type:

今今唯饌圈乃命

It is also used as a part of a personal name in ins. 280.1 and ins. 102.1; the sentence immediately above follows in each case an enumeration, made by the King, of earlier commissions undertaken by the investee; after the sentence, the King states additional commissions that he must attend to and then lists the benefits to be awarded. Thus the meaning of the compound 饔 是 is fairly certainly ascertainable as 'increase', 'enlarge upon', etc.: 'Now I add to your (commands-) feudal appointments ....'. A somewhat similar interpretation must ob-
tain in the compound 鍵圃 and the sentence-types above would allow this; the two second characters should also be close in meaning. Other examples of such variations of 'compound verbs' may be observed in the inscriptions, e.g. 官 龍, 政 龍, 鞠 龍, and 龍 on its own, all employed in identical contexts. The character 鍵, however, appears in a later sentence as: 圍 王敬夕 "... from morning to evening (i.e. at all times) respectfully keep in mind kingly (awe=) dignity'; it is here equivalent to the character 庭 which precedes the 'morning to evening' phrase in line 11, a combination which is paralleled in a number of other inscriptions. Several authorities recognize the first character as equivalent to 庭; Takata Tadasuke and Yang Shu-ta both equate it with 庭 'respectfully', but their arguments are not tenable. Although previous commentators have not suggested it, it is possible that this character may have been intended as part of the preceding sentence; 'you must not dare to fail in your submission (service?) and additional (appointments)'; the combination of 服圃 is not unlike that of 鍵圃 and it seems that an interpretation on this basis could be accepted. However, the following sentence would then appear with 'respectfully' misplaced after the 'morning to evening phrase' contrary to all other examples 20. See Takata's Kochūhen, 43/20a and Yang's Chi wei chu chin wen shuo, p. 30.
in the bronze texts; if the character 頤 should be accepted as equivalent to 庄 or 敬 (the latter is sometimes employed in place of the former before the 'morning to evening' phrase, cf. ins. 121.1), the occurrence of two characters 'respectfully' must also be viewed with strong suspicion. There is little doubt that the compiler has muddled the text badly in this section of the inscription.

Lines 3-4 contain the sentence 'Heaven was about to place its Mandate', which was copied from the Wen Hou Chih Ming chapter of the Shu. In the original source the sentence reads 'Then God on High placed his mandate on Wen Wang', the character 頤 being followed by the particle 乃 and an object. The Mao Kung Ting in its omission of this results in a sentence that seems in itself to be incomplete. In his commentary and pai-hua translation, Tung Tso-pin illustrates the point particularly well by his addition of the characters 於先王 (Ta lu tsan chih, 5.9, pp. 300, 302). The forger has otherwise altered the text by omitting the character 時 and substituting 'Heaven' for 'God on High'; the latter term is consistently avoided throughout the inscription. It has already been observed that certain characters have been incorrectly and confusedly employed; it is by no means inconceivable that the forger might carelessly or even intentionally compose the sentences that are incomplete or are so confused that they will
not admit sense at all. The three characters 雪止庶 in line 14 considered as they stand, as well as in the general context, present definite evidence of corrupt compilation; there are numbers of examples in the inscriptions of each character and their individual meanings are easily ascertainable. The combination is completely devoid of sense and has defied the efforts of numerous scholars to arrive at an interpretation.

The sentence: (if) there are no correct reports(?), great may be kingly wisdom, then this will ruin my Countries,' (lines 15-16) offers various difficulties. The fourth character is interpreted either as 首 (loaned for 爨) 'violence' or as 聽 'hear'; 弘 is equated with 洪 as in the Shu phraseology 洪惟 'great is...'. The main problem lies in the second section 弘其唯王智 which we render as 'great may be kingly wisdom' (正 in the

21. The text should not be too easily understood, otherwise its antiquity may be held in doubt; it is a generally accepted attitude that modern scholars cannot possibly hope to understand entirely the writings of the ancients. Forgers seem to allow for this in some of their products but generally, muddled context, meaningless groups of characters, incomplete sentences, etc. are the result of carelessness in compilation or simply are due to careless selection of sentences and phrases from several different available inscriptions. In the present case the compiler did not observe that when Heaven is the subject of 集, the recipient of the mandate is almost invariably named. When the Former Kings are the subject of this verb, the meaning differs somewhat and 'mandate' becomes the object, e.g. 'achieve the mandate'. (Ku Ming chapter, sect. 5).
inscriptions always appears in the King's speech as the adjective 'royal', 'kingly', never does he refer to himself as 'the King'); commentators have tended to explain the clause as: 'and you merely rely upon the King's wisdom' which is probably the meaning required here, but for which there is really no support in the full context. In line 10 the King states: 'Great is your wisdom' employing the same characters but omitting the particle 其. It is this particle which creates the present problem; a further difficulty is to be noted in the sentence following line 10: 今 非章又
聞 which seems entirely alien to the later example. From the point of view of the context preceding the three-section sentence the meaning that should obtain would be something like: '(If) there are no correct reports, (great=) enhance (this matter) with kingly wisdom, (if this is not done) then this will ruin my Countries.' It is our opinion that a negative particle has been omitted in the last section; the middle section, too, is possibly the result of careless compilation and if rephrased the third section might not then require alteration.

The three 其 particles in this sentence are a unique feature

22. The archaic form of (?) is found in one Sung Catalogue text, ins. 3.156.2, and is transcribed there as 敬 'respect'; it is possible that the Mao Kung Ting forger intended this meaning to apply here as there is a certain correspondence of vocabulary between the two inscriptions in the sentences concerned as well as in nearby sentences.
and there does not appear to be any similarly constructed sentence in the traditional texts of Chou; there is certainly no parallel in the bronze texts, thus a definite interpretation is difficult to arrive at. Nevertheless, sufficient of the text is understandable to cause the reader to doubt that an acceptable interpretation can be effected.

The suspect features together with the definite criteria relating to the script may now be enumerated:

(a) identical characters with inconstant structures,
(b) identical elements of characters written inconstantly.

In the script other characteristics are evident:

(c) characters incompletely written,
(d) varying sizes of characters,
(e) erratically written characters.

This last item applies particularly to several of the variant structures: 写 written as 写 is not only one of several cases of inconstancy but is also an erratically written form - it might possibly be described as an 'incorrectly' written character varying as it does from the usual manner of writing as well as from examples in fully attested documents. The character 写 is written with three centre horizontal strokes
a feature found in only one or two other cases amongst many scores of examples, and again contrary to fully attested forms. In classing a character as 'erratically' written we refer to forms that do not accord with 'standard' structures in the general body of inscriptions. Fully attested materials are still too few to decide definitely what was the 'correct' or 'normal' structure of characters. As further genuine inscriptions are unearthed, comparisons may be made easily and directly with reference to the Major Table placed at the conclusion of this paper, and gradually the value of this suggested criterion will be determined.

(f) characters used incorrectly.

This again is merely a statistical approach and one whose value must await the arrival of fully attested examples of individual character usage. All discussion on character usage is necessarily of a tentative kind; traditional literature is seldom consulted for the simple reason that little, if anything, is known of the reliability of transcriptions made in Han times – the bronze texts, however, are documents that are primary and exhibit contemporaneous features of written expression. A study of character usage limited to such materials will be found of value in itself later on. At present, 'characters used incorrectly' refers to cases where
Plate 8. Rubbing of the Hsi Chia P'an (ins. 129.1)
characters are employed in a fashion contrary to their general use in the inscriptions.

(g) meaningless groups of characters,
(h) characters employed in the sense of incorrect Sung period interpretations (?).

There is not a definite instance of (h) in the Mao Kung Ting - the character [L] is possibly an example.

(i) muddled context,
(j) omissions of necessary characters.

2. ins. 122.1 The Hsi Chia Plan.

1. In the fifth year, the third month, in the last quarter of the month, on the day, keng-yin,
2. the King first went to attack K'an and Yün at T'o-Yü, Hsi-
3. Chia followed the King, severed ears and held judgement, leisurely without violence (?) .
4. The King awarded Hsi-Chia, horses - four, a colt (?), a chariot. The King
5. commanded Chia (saying): 'Govern and superintend Ch'eng-Chou and the Four Quarters of the Kingdom, accumulating (grain) as far (afield)
6. as the Southern Huai-Yi-barbarians. The Huai-Yi-barbarians formerly were my tribute-paying people.
(They) must not
7. dare not to send out their tribute, their
accumulated (stores of grain), their advance-men (?),
8. their stores. (They) must not dare not to
establish camps and markets. Dare
9. not . employ command . then establish punishment-
regulations . attack . Their .... (particle)
10. my feudal princes, the hundred clans, their
stores; must not establish
11. markets. Must not dare either to enter recklessly
and steal (?) from the stores, then also
12. punishment-regulations. 'Hsi-Po-Chi-Fu made this
P'an vessel. May (he) live to a ripe old age
13. for a myriad years without limit, descendents .
forever preciously employ it.

The vessel containing this inscription is at present lodged
in the Nakamura Collection (Shodō Hakubutsukan), Tōkyō, - it
was once in the possession of Ch'en Chish-ch'i. We have several
times examined the vessel observing in particular its newness.

The inscription area has hardly been affected by patination

23. The subject of each character group commencing with 'dare not', 'must not dare', etc. is to be understood as the Huai-Yi-
barbarians; this is not shown in the translation from line 8 to
line 12 in order to illustrate more effectively the discrep-
ancies of the original text in this part of the inscription.
but reproductions of earlier rubbings show the presence of a considerable amount of patina; it has since been cleared away and the underlying metal exhibits little sign of corrosive effects - the original patination was merely a superficial covering. The vessel is a solid object, thick and heavy, and upon close examination of the inscription with earlier reproduced rubbings there remains no doubt that it is, indeed, the original inscribed vessel and not a later copy.

In the inscription text are to be observed several features which suggest that it is a forgery; in recording the number of horses awarded, the numeral and enumerator are written separately and the usual figure of 'three' appears as 'four'. In all other cases the numeral 'three' and the enumerator, \( \text{三个} \), are joined as one character thus: \( \text{三个} \). Chinese commentators invariably transcribe this combination as \( \text{三} \text{个} \) 'four' horses, taking the upper part of \( \text{三个} \) as being also the fourth stroke of the numeral 'four'. That \( \text{三} \) occurs thus on its own, written in the same way as it is in combination, does not seem to worry them; indeed, the present example with the numeral and enumerator separated would surely suggest that even in combination if 'four horses' were meant, four strokes would be used to indicate the fact - not three.\(^{24}\).

\(^{24}\) The same argument is applied to month dates; \( \text{三月} \) is interpreted as the 'third month', the top horizontal stroke of \( \text{三月} \) is considered to form the third stroke also of 'three'. Amongst various recent commentaries several inscription dates
discussion on this point (Chin wen ling shih, p. 58-60) does not necessarily prove that the combined term is to be interpreted as 'four'. He is of the opinion that the spacing of the individual characters (during the engraving of the script) may have in some cases caused three strokes to have been written instead of four. The problem according to him is not really a problem, for there was no 'hard and fast rule as to whether characters should be combined or not' (p. 59). Chou's suggestion that the placement of the characters in the text, the number of characters per line, etc., would influence the interpretation of 3 as 3 or as 4, is not at all acceptable. Many inscriptions employing compounded numerals and enumerators are constructed without any regard for even alignment of characters and a short study of several of these is sufficient to show that the two characters in question are combined not for the reasons he suggests, but because the compiler accepted this particular feature as being the typical way to write the characters. Loehr (whom Chou quotes; we have not seen the original work) apparently considers that the number of strokes denote the number intended and has used the present text example in support of his views. Chou's quotation from the Tao chuan and the commentary prove nothing; the former, as a late Chou period work, is several

24. Have been dealt with in this manner. The evidence put forward is not convincing and in any case, the majority of dated inscriptions illustrates clearly enough that so ambiguous a method of writing numerals was not in general practice.
centuries later than the present inscription is generally adjudged to be; the commentary, moreover, only reflects the view of a post-Chou scholar. Although this quotation from the Tso chuan mentions three horses in the benefices (Chuang, 18th year), and quite a reasonable case might be made in asserting that the original transcription of the commentary was in error here, such speculations lead us nowhere. The fact is, in all Western Chou inscriptions except the present one, horses are enumerated as ＪＪ ； in the present case the division of this common combination into two separate characters and the writing of the three upper strokes as four, may, in the circumstances, be regarded with suspicion.

In line 6, the barbarian Huai tribes are termed the 'Southern Huai Yi' and are placed as the object of the sentence; they also appear as the subject of the next sentence by means of the repetition mark. But only the characters 'Huai Yi' are repeated, 'Southern' is not. A close examination of the character 南, however, will show a small stroke on the right-hand side of the centre vertical stroke: 甫, this is possibly a remnant of a repetition mark which was not completely engraved; as it is actually joined to the vertical stroke, the character will be classed together with other 'erratically written' characters.

The characters 順不用令 (lines 8-9) are
meaningless and furthermore, the prohibitive 母, used twice previously in 母 母 phrases, was omitted here while in line 10 the character 母 was omitted. In the next line 母 is substituted for 母 but neither character seems to fit the sentence. Yang Shu-ta in his transcription of line 10 has unwittingly (?) incorporated the missing character 敢 (Chi wei chi, p. 35 and p. 37) illustrating thus a definite necessity for the character to appear in this sentence. Lines 9-10 are composed of meaningless groups of characters and phrases which have defied the efforts of several commentators. The unusual title-name combination of Hsi-Po-Chi-Fu in line 12 is paralleled nowhere else in the inscriptions; in the same line it will be observed that the 'ripe old age' phrase lacks the characters 図 or 槃 'to pray for' before it.

Inconstancy of character structures occurs in several cases: 住 as 建, 建; 敢 as 建(建), 建, 建; 求 as 求, 求, 求; 我 as 我, 我; 各 as 各, 各; elements of characters are also inconstant: 見 appears as 見, 見, and 見; 巴 as 巴, 巴, and 巴. Several characters are written erratically: 政 as 政, 程 as 程, 程, 成 as 成, 南 as 南. Other discrepancies in the script may be noted but the above are quite sufficient to illustrate the forgery. Criteria and suspect features to be enumerated are:

(a) character structures inconstant,
(b) elements of characters inconstant,
(c) erratically written characters,
(d) incompletely written characters,
(e) elements of single characters written as two separate characters.

Here, reference is made to the character 改 being written contrary to all other examples, as two characters; in later cases it will be observed that the elements of single characters are quite incorrectly divided to form entirely separate characters (e.g. ins. T.162.1, p. 298).

(f) characters used incorrectly (?),
(g) meaningless groups of characters,
(h) muddled context,
(i) omissions of necessary characters,
(j) month-quarter term (?).

Four terms denoting quarters of the month are employed in the inscriptions; there is reason to suspect that two of the terms as written in unattested inscriptions were never used in the Chou period. For convenience of later study their occurrence in the inscriptions will be recorded.25.

3. ins. T.24.3 The Ch'en Yi Fu.

1. In the King's first month, the first quarter of the month, on the day, ting-

25. See Appendix A for further details regarding the possible importance of the month-quarter as a criterion of forgery.
Plate 9. Photo of text area and a hand-copy of the Ch'en Yi Fu inscription (ins. T.74.3).
2. hai; the young person, Ch'en Yi, stated; "I am a
descendant of Ch'en Huan-tzu; I have
reverently served the Marquis of Ch'i and have
been generously treated (by his)
family and clansmen. (I have) selected his
(this?) auspicious metal
to make his principal wife, Chi-Chiang's (止)
sacrificial vessel and have cast this
valuable Fu-vessel; to be used in sacrifice
and filial loyalty
to the great family, the august (deceased) grand-
fathers and the august (deceased)
grandmothers; (my) august deceased father and
august deceased mother; to create ....
eternal command, (and in) prayers for a ripe
old age. For myriads of
years, descendants forever preserve and employ
(it).

The Ch'en Huan-tzu here and in other inscriptions of Ch'i
is generally accepted as Ch'en Wu-yu, a high minister of Ch'i
during the reign of Chuang Kung (553-548 B.C.) and a fifth
generation descendant of Ch'en Ching-chung who earlier took
refuge in Ch'i (671 B.C.). The Ch'en family (also recorded as
There is apparently some dispute as to whether the inscribed bronze discussed here is actually the same article reproduced by Juan Yuan in his catalogue. Pao Ting states that 'Juan's vessel was destroyed by fire; this is another vessel' - referring to the rubbing in the Chou chin wen ts'ung (Kuo ch'ao chin wen chu lu piao fu yi, A/43a). Wang Kuo-wei simply notes that the rubbing in the Ch'i ku Catalogue is taken from a copy of the original vessel (Kuo ch'ao chin wen chu lu piao, 3/4a). Neither catalogue is available to us; however, the San tai Catalogue rubbing and one in the Naito Collection as well as the vessel text itself accords in every significant detail (except in patination) with Juan Yuan's hand-copy. We do not know if Pao Ting's statement above is to be interpreted literally - according to Juan's catalogue there is no reason to believe he actually owned the vessel.
having adopted the clan-name of T'ien) gradually encroached on the authority of Ch'i's ruling house of Chiang and finally superceded it in the possession of the State (385 B.C.).

Ch'en-Yi is represented here as a scion of the Ch'en family living some time before the usurpation took place; Juan Yuan suggests that the date above coincides with the 20th year of Duke Ai of Lu (473 B.C.) which corresponds with the 5th year of Duke P'ing of Ch'i (Ch'iku Catalogue, 7/11b). Kuo Mo-jo also accepts this reckoning (K'ao shih, p. 215b). Ch'en Yi's principal wife was a daughter of the ruling house, and he himself was a trusted retainer of the ruler of Ch'i; he has not, however, been recorded in history nor does his wife's name appear. A document containing such information, if genuine, would be of considerable value in adding to our knowledge of the rise of the T'ien family in Ch'i and in building up a more complete genealogical list of its members. However, the inscription is not genuine but is a forgery produced in the 18th century.*

Inconstancy may be noted in the elements of: 雙 and 即; 鍶 and 鍶 (鎛!); 月 and 木 (木 element); # and 火; 🗑 and 🗑; etc. Various characters are written incorrectly and show clearly the ignorance of the compiler of the archaic script: 月 for 月; 月 for 月; 月 for 月; 月 for 月; etc. No attempt was made to correct, in the vessel model, such errors as occur in the characters 母 (line 10) and 壽.
It is not insinuated in these remarks that S.480.1 is a forgery or even suspected; the Sung Catalogues contain reproductions of faked copies of the inscription, but the original may well be genuine. In ins. 82.1, recently excavated at Shou Hsien (see Section Six), the term 少子 appears (incorrectly transcribed by Kuo Mo-jo as 小子, K'ao ku hsueh pao, 11/1, and correctly rendered by Ch'en Meng-chia in the next number of this bulletin (12/109)). It is employed as a self-deprecatory term and as in ins. S.480.1 is part of the vessel-maker's 'speech'. The variation of usage as exhibited in ins. T.74.3 appears thus possibly as an incorrect use of the term; the text should read: 'Ch'en-Yi said, "I, an insignificant person, am a descendant ..."'. The meaning of the term is clearly evident in the attested text preceded as it is by the character 末; the translation here should be amended.
(line 11) where the engraver's stylus carelessly slipped several times cutting a number of unnecessary strokes in each character. These could easily have been repaired before the mould was made.

In the context there is possible evidence of forgery; the term 少 is very rare. Juan Yuan suggests that it is equivalent to 小; Kuo Mo-jo maintains the original form, but neither commentator attempts to explain its meaning in this context. Karlgren, in his partial translation gives the rendering of: 'the young man, Ch'en I, said ...' (vessel C.283, Yin and Chou, p. 77) which is followed in our translation. The term is, however, so like the 'small child' phrase found often in the speeches of the Kings of Chou and occasionally in those of the feudal nobles - always preceded by the first person pronoun - that we wonder if this is not, indeed, what the compiler intended. In the 18th century the term 少 was available only in ins.1830.1; even should it later be discovered to be an actual Eastern Chou period expression, it must, in the present case, have been copied from the long Sung Catalogue inscription. Lines 9-10 present further indication of this possibility and appear to be directly based on lines 64-66 of ins. S.1830.1. Juan Yuan transcribes the characters: 王 as 封 and regards the characters: 裔 and 省 as names of territories belonging to Ch'en Yi, but as regards 亭 and 母 (line 10) he is silent.
Kuo transcribes 皇 as 皇 and writes the characters following as: 必 - 祖, 木 as 礼 - 姬, 于 as 乃 - 晓; in this way sense may be forced from the thoroughly corrupt script but only at the expense of the original characters. He is content to accept 于 as 于 in line 9, but in line 10, the same character with a small addition stroke above it (cf. 于 = 于 ins. S.480.1) is read as 于, an abbreviated form of考 found only in a few Sung Catalogue inscriptions. His five transcriptions above are not really tenable; our translation is based on these only to avoid a series of blank spaces. Juan Yuen's transcription of 封 is the more acceptable but it does not assist the sense, for obviously 于 and 考 are unlikely names of territories; in any case, there is no point whatsoever in listing feudal territories in this section of the text.

Juan Yuen first published the inscription copying it from a rubbing he had received (Chi ku Catalogue, 7/10a); it has appeared in several catalogues since and a rubbing is reproduced in the San tai Catalogue (10/25b). The original vessel is lodged in the Auckland Institute and Museum, New Zealand, and was recently recognised by us after a personal examination of the

26. Kuo has, of course, based his rendering on the similar text of ins. S.480.1; but the archaic form which he transcribes as 皇 is definitely not this character; in the archaic graph transcribed as 祖 there is an 'ear' element but no sign of a 乃 element. Kuo is correct in discovering the parallel; its significance, however, was not appreciated.
vessel. The patination is superficial and in one place in the text area where a small mound of patina covered part of the upper element of the fourth character in line 7 (c.f., Juan Yüan's handcopy and Lo Chen-yü's rubbing) and has since been removed, the metal surface exhibits no sign of corrosion. It is not always that the observer is fortunate enough to have evidence of this kind recorded; judging by the two earlier reproductions patina also filled some of the scratchings around the characters 命 and 吕; here, too, the patina was artificially added. The first and last lines of the inscription text were partly smudged during the preparation of the model when the adjoining sides of the tray were attached; the inscription was first engraved into the bottom of the vessel interior but the engraver misjudged the area safely available. When attaching the sides to the base, parts of the characters were inadvertently incorporated into the join. It would seem that the vessel model was made of wax, for this method of assembling the sides to the base would be difficult to achieve in clay. The engraver thus had a convenient flat surface on which to carve out the text, yet he was unable to maintain even spacing or constant sizes of characters; the script is badly executed and exhibits little understanding of the basic principles of writing in archaic characters. In some cases the characters are squashed too closely together (line 3, nos. 2, 3 and 4); complex forms and
even fairly simple characters (e.g. \(\frac{1}{2}\)) are written in the space of two normal size characters.

The forgery offers particularly good evidence of the validity of our remarks on Section One regarding the choice of historical material made by forgers (p. 59) and also of our opinion regarding the danger of relying merely upon the judgement of 'experts' in respect to the authenticity of the bronze inscriptions (p. 72). A whole line of experts, including Juan Yuan, Wu Shih-fen, Liu Hsin-yuan, Lo Chen-yü, and Kuo Mo-jo have accepted it as a genuine article without raising the least doubt of its genuineness. Possibly none of them had ever handled the vessel, and only relied on rubbings and reproductions in their study of it, no doubt the fact that the first great scholar in Chin Shih Hsueh since Sung times, Juan Yuan, accepted it, influenced their attitude as much as any other factor.

In his choice of subject matter the faker was shrewd: the maker of the vessel was not known in the traditional histories but he refers to an ancestor whose name, as it appears in the inscription, might be paralleled with one of several recorded personages. To represent him as the husband of a daughter of the ruling family (or to show his close association with the family) lends a further air of authenticity to the text. Scholars who might wish to dispute its antiquity have thus no
Plate 10. Rubbing of ins. 71.2.
ground for argument - nothing is known of this mythical descendant of the T'ien family other than the record in the inscription.

Although the archaic characters are written very roughly, they nevertheless offer a clue as to the source from which they were copied. Characters such as 孝, 子, 孟, 孴, 吉, etc. have obviously been copied from ins. S.180.1; certain features of other characters, too, are common to possible prototypes in this long inscription.

The features to be suspected are:

(a) inconstancy of character structures,
(b) erratically written characters,
(c) badly executed script,
(d) characters incompletely written,
(e) varying sizes of characters,
(f) characters squashed unnecessarily close together,
(g) month-quarter (?)

The reader may have observed that physical features suspected have not been recorded in these lists; such items are purposely omitted as we have not had the opportunity of viewing more than a small proportion of the inscribed vessels surveyed in this paper.

4. ins. 71.2

1. In the third month, the first quarter of the month, on the day, yi-mao, the King
| 1.  | 住三月初吉乙卯.壬 |  |
| 2.  | 才周.香.各大室.南宫 |  |
| 3.  | 叔入門.姬芻夾死嗣 |  |
| 4.  | 戌.敏.静安附土.天子 |  |
| 5.  | 賜女繖嫁.用縂止. |  |
| 6.  | 賜女乘馬戈.青玉矢. |  |
| 7.  | 又賜女邦嗣百人.用 |  |
| 8.  | 戌用政.握天子休.用 |  |
| 9.  | 乍隴菑.萬年其永寵 |  |

Fig. 14. Transcription in modern character forms of ins. 21.2.
2. was in Chou ..., arrived in the Great Hall, Nan-Kung-
3. Shu entered the doorway, then assisted (?) summoned (?) Chia to superintend until death
4. the Jung tribes; actively quietly pacify the States and Territories. The Son of Heaven
5. .... awards you bells for horse's harness, a banner; employ (these in) ....
6. Awards you horses (from) ...., a dagger-axe with ornamented handle, red arrows.
7. Also awards you State Supervisors (?) - one hundred men; Employ (these in)
8. military (affairs), employ (these in) civil affairs. Extol the Son of Heaven's grace; therefore.
9. made (this) honoured Yi-vessel. A myriad years may it forever be cherished.

In a finely printed catalogue of far Eastern art entitled 'Asiatic Art, in private collections of Holland and Belgium,' compiled by H. F. E. Visser and printed in 1948, is reproduced for the first time a rubbing of an inscription, typical of the Western Chou style, containing a total of 71 characters. In the caption referring to this vessel and its inscription, Visser has written:
Shang or Early Chou period. Dark greyish green and rust brown glossy patination.
H. 17 cm. Inscription (by Prof. Karlgren):
this important inscription I have not found in any of the repertories I know. I cannot
decipher it all, there being several obscure characters, but it starts:
"In the 3rd month, 1st quarter, on the day
yi-mao, the King was in Chou; at daybreak
he went to the Great Room (sc. in the temple.)
Man-Kung Shu entered the door ..."
This Man-Kung Shu might be some relative
(younger brother?) of the Man-Kung Chung who
occurs on the earliest Chou vessels in my
"Yin and Chou" (B 1 -- 8), though from the
ductus and the regularity of the script I
should deem it somewhat later.
Private collection, Holland.'

The inscription is still apparently unstudied for it has not
yet received the attention of students of Chin Shih Hsueh in any
publication since the above catalogue was printed; Karlgren's
short note seems to be the sum total of all that has been written
about this informative text.

The translation above is rendered in our usual style
without any attempt to read more than is warranted out of the
original text for reasons stated early in the survey. It is
now possible to illustrate the importance of this discipline
with a concrete example. A literal translation often will not
read well, but sense is even more difficult to arrive at if the
original text is corrupt, and when it is expressed literally
sometimes merely a jumble of nonsense results. In this inscrip-
tion appear four characters which are difficult to interpret, a
space is left in the translation in each case; in line 2 the obscure character is 青 'darkness'; in line 5 the character 療 is not decipherable; in this same line the character 隱 is a badly written form of 隱 usually transcribed as or 獸, the lower element 亼 is mistakenly engraved as a separate character; in the sixth line the character preceding 'horses' is possibly a place-name. If these observations are incorporated, little improvement in sense will result, and this is in no way connected with the difficult second and third characters just noted. The problem of interpretation found here is representative of numerous inscriptions of similar length and content. Western sinologists usually overcome such difficulties by presenting a free and often somewhat imaginative rendering of what they believe to be the meaning of the text; if we adopt this practice something along the following lines might result:

1. In the third month, the first quarter of the month,
on the day, yi-mao, the King

2. was in Chou and early at dawn arrived in the Great
Hall of the Temple, Nan-Kung-

3. Shu entered through the doorway and then summoned
Chia. (The King addressed him, saying):
"You must, even until the end of your life,
superintend the affairs of the

4. Jung tribes; (I command that) you actively and
gently achieve peace amongst the States and the Territories. I, the Son of Heaven

5. ... award you with (this set of) bells for horse's harness (and this) banner; employ these articles in...

6. I also award you with horses from ..., a dagger-axe with ornamented handle and a supply of red-coloured arrows.

7. I also award you with officials trained in State Service - one hundred men; employ these in attending to

8. the affairs of war and the affairs of peace.

You must extol your sovereign, the Son of Heaven, for his munificence." (Having thus received the King's grace, I, Chia)

9. had cast this honoured Yi-vessel; may it ever be cherished even unto a myriad years.

Such a free rendering is possible (other variations could be suggested, too,) on the basis of the original archaic text providing that it is not rigidly followed; the rendering reads smoothly and the whole document seems clearly understandable; it is certainly more palatable than the literal translation presented previously, but no thorough student of the bronze inscriptions will accept such a free rendering without careful
consideration of the original text. If he reads the archaic text and compares it with that of other similar inscriptions he will note certain inconsistencies e.g. the subject of 'summoned Chia' and of 'until death superintend the Jung tribes' incorrectly appears as the person Nan-Kung-Shu who obtains here either the function of the 'entrant on the right' found in numerous other inscriptions, or that of the investee. Proper sense will result in this section only if the King appears as the subject, but the original text gives no indication that such an interpretation was intended by the compiler. It may be noted, furthermore, that in no other bronze text does the King use the phrase 'Son of Heaven' in the sense of 'I, the Son of Heaven'; nor does he elsewhere command the investee to 'extol his (the Son of Heaven's) grace.' It might, of course, be suggested that such inconsistencies are apparent ones only and are merely a characteristic of a concise literary style wherein the subject is omitted and must be understood. Such methods of

27. It is our contention that the forger may have intended Nan-Kung-Shu to be the investee, not realizing the generally accepted interpretation of the character Chia as a proper name (c.f., ins. T.285.1, line 12).

28. As the obeisance phraseology and the investee's bowing of head, etc. have been omitted in the present text and the investee's name does not precede the extol phraseology, the sense of this section is indeed vague. It is, perhaps, not entirely justifiable to interpret the King as the subject of the 'extol the Son of Heaven's grace' for numerous inscriptions testify as to what is meant here. However, the text itself is the object of the enquiry, and the interpretation is strictly limited to the original context.
interpretation may result in sensible and free-flowing translations, but it is not always possible to be certain that the original meaning has been resolved; in the present text, however, we are most fortunate in possessing the means of determining the significance of this literary style and, furthermore, it is possible to illustrate the manner in which the compiler of the inscription worked and to follow each step he took in composing the text.

He had first to select a date and turned to ins. 68,1 in the Chun Ku Catalogue (3:1/60) and copied out the characters:

佳三月初吉乙卯王

This date combination does not occur in any other inscription. He then turned back four pages to ins. T.64,2 and added to his text the three last characters of the first line:

才冊青

These commenced the second line of his compilation; but at this stage he was a little careless and did not bother to note the significance of the remaining characters of ins. T.64,3. He forgot to include the second character of the compound term 香爽 'at break of dawn', and unconscious of the omission turned back to ins. 68,1 to continue his copying from there.
His idea was to avoid too obvious a parallel with the second inscription; thus, by incorporating the term 周者 he felt that he was directing attention away from the common of the first inscription; then he proceeded to copy three more characters from the first text:

名 大 室

Having completed this, he decided that it would be wise to turn to an entirely different part of the catalogue; to remain too long selecting phrases from inscriptions in the one volume might result in discovery of the fraud. So he placed aside the volume and turned to the famous Ta Yü Ting text (ins. T.385.1) for further inspiration but the remaining text of ins. 68.1 viz. 咸 井 射 入 吴 still appealed to him as a suitable basis for the next few characters; the name, Ching-Shu, particularly caught his fancy. Accordingly he decided to coin a name which would throw suspending scholars off the scent and wrote then the characters:

南 宫 书 入 门

The first character may have been chosen from the ancestor's name, Nan Kung, in the Ta Yü Ting; this sentence cannot be definitely paralleled as there exist numerous examples in various inscriptions. What may be noted, however, is the
rather obvious substitution of 'door' for 'assist on the right';
as a result of this, Nan Kung Shu (a name-type common to
'entrants on the right') obtains the position of the investee.
Unfortunately, the next 'sentence' selected (from ins. T.285,1)
contains a proper name which might also be interpreted here as
that of the investee! In the original context of the Ta Yü
Ting, the person, Chia, is not an investee; the selection reads:

逆紹夫死簡成敏

The last character is the first word of the following sentence
in the Ta Yü Ting text and is in no way connected with the
preceding six characters which together form a complete sentence.
This is the second occasion where the forger misinterpreted
his sources and it shows clearly that he was not thoroughly
versed in the reading of the archaic script. To this he added
seven more characters which presumably were his own combination,
or possibly they were copied from a portion of some text which
is not recorded:

靜安除土天子

A further inscription was then consulted for the benefits
繭繭 and together with the Ta Yü Ting text and ins.
T.104:4 the next sentence was created:

腸女(T.104:4)繭繭(various sources)
Having thus carefully mixed his sources he unabashedly drew the bulk of the next sentence from ins. T.104.4:

賜女奚馬 (lines 6-7), 戈青 (various sources), 紹矢 (line 7)

Then he returned to the Ta Ya Ting adopting the following sentence with an improvement on the original (ınd for 丁) and omitting the numeral 'four':

賜女邦卿百人

A continuity was maintained by employing the character 賜 throughout the above three sentences. Ins. T.104.4 contributed the next four characters:

用伐用政

This phrase is one typical of various texts. As to the remaining three sentences, they may be found in many inscriptions; there is no point in presenting examples of all the possible prototypes.

If we are correct now in suggesting that the inscription was not compiled in Western Chou times, but is the work of a recent forger, then our reconstruction of his method of selecting more or less suitable phrases and sentences from a

---

29. The second character is actually written 彊 instead of the usual 伐; the significance of this is commented upon later.
variety of existing inscription types fully accounts for the lack of continuity in thought and style so evident in this text.

From the description of the vessel and the published photograph it would appear that its general characteristics differ little from those of numerous other vessels illustrated in various catalogues; in other words, it seems to possess every appearance of being a genuine article. However, the inscription is a cast one and if it is proven to be spurious, then the vessel, too, must likewise be labelled a fake. It would not be too difficult a task for an experienced forger (or group of forgers) to create, on the basis of known examples, a vessel of currently accepted Chou period style incorporating within it an inscription of appropriate content and script-type, then aging the product by means of chemical corrosion, baking, and finally waxing the artificial patination. All that would then remain to be done would be to ascribe to the product a suitable story of its provenance and cautiously bring it into the antique market for sale. 30.

30. The forger had numerous prototypes to consult: K'ao ku Catalogue 4/20a; Po ku Catalogue 8/6a, 8/7a, 8/27a, 8/27b, 8/29a; Hsi ch'ing Catalogue 14/23a, 14/23b, 14/23c, 14/24a; Hsu chien (B) Catalogue 7/17a, 7/18a, 7/19a, 7/20a; etc. The majority of these, however, lack inscriptions or contain short texts of no more than a half-dozen characters; this, of course, may not be significant. It is interesting to observe that the earliest recorded vessel with a combination of the three decor elements, although a Kuei-vessel with handles, contains an incomplete 乏 鲁 閏 inscription (K'ao ku Catalogue, 4/20a). It is said to have been obtained in Hsin Cheng but because of the incomplete
The study so far has been limited to a comparison of sentences and phrases in the inscription with those in other texts by means of modern characters; this procedure is not above criticism for, although it is convenient to the reader unversed in the archaic script, it does not necessarily illustrate conclusively the method of selection as practised by the compiler of the inscription. It may be argued, for instance, that this feature of stereotyped phraseology is typical of ancient writing and is not necessarily a proof of forgery. In criticism of a similar study of the great sinologue, Henri Maspero, of one of the inscriptions referred to above, (T.164.4), Karlgren has remarked:

'In ancient China the same theme, the same phraseology, the same rimed stanzas right in the middle of a prose text crop up everywhere, they are a communis modus, woven by every author into his own fabric without the least hesitation or compunction.' (Yin and Chou, p. 13).

No doubt this is a true feature of the ancient literature and also it is characteristic of the texts in the corpus of bronze inscriptions; however, it must be remembered that in both 30. text must be strongly suspected as a fake. All the above examples otherwise lack testimony (the list is not exhaustive); however, authenticated examples of similar decor combinations are known, e.g. a Pien-vessel excavated by the Academia Sinica illustrated in a recently published set of cards, Yin hou ch'un t'ung ch'ien, Taipei, (1955).
cases the documents concerned generally lack acceptable testimony of their origin and a great deal of this material will, in the ensuing decades, require revised studies as to the nature of its authenticity in the light of current and future archaeological discovery.

We do not believe that authentic ancient literary works were created by a slavish incorporation of stereotyped phrases and sentences, exhibiting little individuality on the part of the writer; it is not to be assumed, of course, that quotations and numbers of stock phrases were not incorporated in the process of writing, but it would indeed be remarkable if Chou period scribes had developed the art of literary expression into so stylized a type that they were, in effect, drawing upon a general fund of standardised expressions at nearly every stroke of the brush. This is exactly the characteristic of the inscription under study, and it is amply illustrated with reference to the parallels found in other inscribed bronzes.

If a close study is made of the archaic script of the parallel sentences and phrases there will remain no doubt at all that the writing of the Chia Yi-vessel text was based on the scripts of the several inscriptions already noted. Although a certain degree of standardisation in the ductus of the characters is to be observed, the compiler has nevertheless allowed sufficient evidence to appear illustrating his slavish copying not only of the sections concerned but also of the character structures as
they appear in the same phrases and sentences in the original inscriptions. He shows a certain amount of ingenuity at times and changes the character forms in one or two cases into other variations in a studied attempt to cover his nefarious activities. All such variations occur in inscriptions that were available to him. The reproduced rubbing from which we are working was made by a person who was inexperienced in this somewhat difficult art; some areas of the paper are far too heavily inked and as a result several character strokes appear grey in colour, while others are almost completely blacked out. Good rubbings exhibit a uniformity of colour and leave sufficient indication of the nature of unremoved patina for the scholar to judge whether affected characters actually lack

31. The inscriptions consulted by the forger during the process of compilation fall into three main chronological groups (as determined by Karlgren): T.285.1 Yin-Chou type (E17); T.104.1 and T.41.2 Middle Chou type (B107 and B98); T.64.3 and T.65.1 - indefinite, probably Middle Chou (B157 and E156); T.60.1 is Huai (C165). The vessel is classifiable as Shang or Early Chou (i.e. Yin-Chou) but contains thus an admixture (somewhat standardised) of Yin-Chou, Middle Chou and Huai style characters! The futility of attempting chronological classification of unattested inscriptions on the basis of 'script-type' is amply illustrated here. Not only this, the present inscription proves the validity of our earlier argument (p. 75) that forgers had more than a vague idea of what constitutes 'the laws of art history'. The producer of this vessel knew (a) the type of vessel required, (b) the inscription-type suitable for it, and (c) was wise enough to standardise the ductus of the archaic script to conform with (a) and (b). That he was the only faker who could have achieved such success is, of course, hardly possible; other unscrupulous individuals were equally conversant with the general requirements of 'genuine' inscribed vessels.
apparently missing strokes or not; in order to lighten the task of study good contrast of pure white with dark-grey or black is achieved. However, notwithstanding the disadvantages present in this reproduction (even the negative appears to have suffered damage between lines 2 and 3 during the process of block making), some physical characteristics of the original document are determinable; it is evident that the stroke grooves are cleanly cut and well defined, whatever patination may have originally covered the text area has, for the most part, been removed leaving only a slightly pitted surface. Although a number of characters or portions of characters have been inked in (some retouching of the negative is apparent in places), their original structure is still easily determined; there are one or two cases that will require personal inspection of the vessel, or of an unmounted original rubbing, before we can be definitely certain of the actual character structure.\footnote{Unmounted rubbings are particularly useful materials to work with as they still exhibit the indentations of the original inscription area; interpretations of character structures which may have been inked in on the surface of the paper, can be achieved from a study of the reverse side of the paper. The study of inscriptions per media of reproduced rubbings is not a straightforward task of merely reading the texts; allowance must be made for various possible deformities such as those in the present rubbing. Not only this, it is also important that the student should have experience in the making of rubbings himself, and should thus realize better the intrinsic difficulties involved in detailed interpretation. As most of his available material is in the form of printed reproductions, he must gain practice in making interpretations from the resulting copies which}
Fig. 15(a). The text and the prototypes from which it was compiled.
our hand-copy represent what we believe to be inked-in strokes in these characters.

The drawing of several characters exhibits the forger's ignorance of correct structural forms; note the 'tree' element in 亻, the left-hand element of 亻 and also the incomplete 'King' element in this character; the unnecessary stroke alongside the 'eye' element of 亻; the incomplete writing of 亻; etc. Such features suggest immediately that the writer was either careless in his copying or simply was unaware of the errors; incomplete characters like 亻 and 亻 may have originated thus during the preparation of the mould for casting and possibly were engraved completely in the vessel-model.

If the reader will now turn his attention to Fig. 15 he will note, in the case of the first character of the text, absolute proof that ins. 68.1 was the prototype consulted in preparing the date sentence; the peculiar form of 亻 which usually has the lower two 'feather' strokes (here only one is drawn in ins. 68.1) on the right-hand side of the curved 'body' stroke, has a single feather stroke on the left-hand side. This

---

32. lose details in the photographic process; in the present reproduction the focus is not sharp, yet from constant practice in using this material we know that the original rubbing illustrated a clear-cut script. When the student has spent many hours comparing original rubbings with reproductions against the original inscriptions, when he has compared various reproductions of identical inscriptions taken from different rubbings, he will gradually develop the ability to interpret important features that will assist him to understand as fully as possible the original nature of the inscriptions.
<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>ighest 中间 金牌 中</td>
<td>金牌 中间 金牌 中</td>
<td>金牌 中间 金牌 中</td>
<td>金牌 中间 金牌 中</td>
<td>金牌 中间 金牌 中</td>
<td>金牌 中间 金牌 中</td>
<td>金牌 中间 金牌 中</td>
<td>金牌 中间 金牌 中</td>
</tr>
<tr>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
</tr>
<tr>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
<td>T.104.4</td>
</tr>
</tbody>
</table>

Fig. 15(b).
characteristic is duplicated in  for no other reason than the fact that ins. 68.1 was directly copied when the inscription was being compiled; it is significant, too, that the very first character should appear identical in every respect whereas the following characters (c.f. A3: a3; A7: a7; A8: a8;) manifest a growing tendency towards somewhat more than slight shape variations, a natural enough feature of human failing when copying by eye, (note our own hand-copy!). B.2 (周) and B.3 (春) are fully evident as direct copies of the identical characters in ins. T.64.3; the next three could have been selected from various inscriptions, but the shapes are extremely close to those in ins. 68.1. In cases of such common characters, a forger with some knowledge of the archaic script would hardly bother to attempt to copy shapes exactly but would write the characters more or less from memory. Characters B.7 (南) and B.8 (图片) could have been copied from several sources.

In ins. T.285.1 the complex character C.5 appears three times with the centre element written as 图 and as 图 (the third occurrence is not clear); this variation of structure is preserved in the present inscription in the same sentence.

33. In the central element of this character (图片) a vertical stroke appears in the Ta Yu Ting forms which was omitted in the present inscription character, otherwise the structure is identical. The omission of such a stroke does not affect the discussion above because this is a feature that must be allowed for in faked copies; it is the result of negligence or ignorance on the part of the forger. In copying a difficult character which may be found repeated two or three times in the original inscription
Fig. 15(c).
However, the last character ² appears as a reversal of the Ta Yu Ting form; this may have been an intentional reversal to direct attention away from the Ta Yu Ting character (it is also possible that the forger had in mind the form in ins. 121.1 which was first published at the turn of the century). We have not been able to find any direct parallels of the sentence D.3 – D.6, while the next three characters (D.7 – E.1) occur in combination only in the present text; however, the source of D.3 – D.6 can be fairly accurately determined. The three characters appear in ins. T.60.4 (lines 10-11) and are written thus:

The style of the script is quite unlike that required in our inscription, but the last character 'country' presents a clue as to what the forger did: he knew of the term 'gently pacify' in this inscription and copied it in a style to accord with the present script, then decided to add the phrase ³FY ²; in

33. the forger will naturally check obscure portions of the character in the phrase or sentence being copied with the other forms; as a consequence of this it becomes a difficult task to discover his manipulations of structural detail. The element ² discussed above is the deciding factor — he adopted the form noted simply because it was so written in the sentence copied and was clear enough to copy without reference to the other examples.
the adjacent line of ins. T.60.4 was the character 'country', but he remembered that, in the text area of ins. T.285.1 from which he had copied the previous sentence, there was also a character 'country' without the 'mouth' element; so he proceeded to write the character on the basis of its structure in ins. T.60.4 but omitting this element. Later, it will be noted, the same character appears again in the present inscription but obviously copied directly from ins. T.285.1 with the elements normally located to accord with the form written there. Only in ins. T.60.4 does this character occur with the \( \mathcal{Z} \) element on the left. It is a reversal of the normal form. The forger did not observe that the Ta Yu Ting text has a second character 'country' in line 2 with the 'mouth' element; because he had already decided to incorporate the later sentence G.3 - G.7 from this inscription, he was attempting here to maintain the same form of the character, but unconsciously he copied the reversal of elements in the one and only inscription in which it so appears.

Characters E.2, F.1, and G.2 (\( \mathcal{Z} \)) are obvious copies of the forms in ins. T.104.4; in composing this sentence the forger was working also from ins. T.285.1, four characters were selected from the latter text and two from the former. An interesting observation is to be noted in regard to the character \( \mathcal{O} \); it occurs in numerous texts in the sense of
'bells for horse's trappings' and in every such instance (except in our inscription) the short top horizontal stroke never appears. In a few inscriptions the present character form of 马 is employed in the sense of a proper name - the Man Barbarians. There is one exception where the simpler form (i.e., minus the top stroke) is also used as a proper name (ins. 123.1). Notwithstanding this exception, it is quite evident that the forger copied the proper name form, used as such, in ins. T.104.4 not realizing its significance. The second article of benefice, 'banner' (B.5) is obviously based on the Ta Yu Ting character which, however, contrary to the usual pairing of 執, does not include the first character. The last character in this line differs slightly from the Ta Yu Ting form, but because of the reversal of the elements, there can be little doubt as to its origin.

Sentence F.1 - F.8 is similarly a composite one based largely on ins. T.104.4 both for content and for character structures; three characters, 马, 止 and 前, however, were selected from other sources: 马 probably from the Ta Yu Ting, 止 occurs in many inscriptions, but 前 as drawn in the present inscription occurs only in ins. 103.1 and 104.2 without the centre vertical stroke in the 'Chou' portion of the character. In the parallel sentence of ins. T.104.4, the sense is obscure because of the character 青 following 'award'; the forger noted this and chose the two characters 止 前 from
another source rather than risk possible discovery by duplicating the meaningless 用弓. In commencing the next sentence he decided to use the character 又, 'again', 'also', a rather novel method of breaking the monotony of the three characters 'award'. The improvement upon the parallel Ta Yu Ting sentence has already been noted; various attempts have been made to explain the significance of 白 in this part of the text. Our forger seems to have been aware of the difficulty and ingeniously wrote 白 in place of 白, thus disguising his source of this sentence. His selection of the next four characters 用 戒 用 政 shows a similar appreciation of the difficulty of making sense of the relevant 'sentence' in ins. T.104:4 because of the character 賀 which precedes it; by omitting the character and placing only the above four characters here, this part of the text now reads reasonably well. However, the second character (H.1) appears as 戒 (cyclical character) or possibly 戒 (axe), neither of which suits the context; the character should be 伐. There is a faint possibility that an inspection of the original text may show that it is indeed this character which is engraved here, but as far as it is possible to judge from the reproduction, it appears that the forger has again illustrated his cleverness in leaving the left-hand element as only a partial stroke. It could be any one of the above three yet it is practically identical to the form in ins. T.104:4.
Parallels of the remaining characters will not be considered in detail as they are so common that numerous prototypes might be suggested. H.4 (揚) and H.7 (休) are both unique forms lacking parallels in any archaic text.

It will be observed that the Chun ku Catalogue contains every inscription which we definitely know was consulted or copied by the forger; this catalogue was first published in 1896. The earliest discovered inscriptions of those referred to are recorded vaguely as having been excavated at various times in the first half of last century, thus it is possible to compute the approximate date when the inscribed vessel was manufactured. The latest find whose date of discovery is known is that of the Ta Yu Ting which is said to have been discovered in the early 1820's in Mei Hsien, Shensi; the vessel must have

34. Ch'en Meng-chia presents an excellent resume of the various accounts of the Ta Yu Ting find in a recent issue of the K'ao ku hsueh nao, (11/24-5). The accounts are consistent in as much as the location and the date of the discovery are placed in the early years of Tao Kuang in Mei Hsien; the lists of owners, however, do not accord well. Liu Hsin-yuen records a Mr. Sung as its first possessor who hid the vessel and allowed no one to see it - an interesting circumstance that may be compared to Ch'en Chih-ch'i's eccentric behaviour in regard to the Hao Kung Ting. The accounts collected by Ch'en Meng-chia illustrate quite well the difficulty of placing reliance on archaeological data whose very origin is cloaked in mystery. The story of the find apparently commenced no earlier than the 60's or 70's of last century, and is found in the writings of Wu Shin-fen, Wu Ta-ch'eng, Liu Hsin-yuan, etc. There does not seem to be any earlier written record. This may not, of course, be significant, and it is quite possible that the story may have originally accompanied the first appearance of the vessel; as there is no proof of the matter, and also as Shensi is notorious as the home of forgers, the student
been made some time after this. As there are no details regarding ins. 68.1, first published in the above catalogue, it may be thought that 1896 should be considered the earliest date the forgery was made. However, there is no reason to believe that this inscription was not earlier available to the forger either in the form of the original vessel, or as a rubbing. We are on safer ground to suggest that the vessel was made in the last half of the 19th century. But another alternative must be pointed out; the vessel may have been manufactured sometime in the present century - possibly only a few years before it reached Europe. This is suggested on the grounds that it left China without scholars there having any knowledge of its existence; an inscription of such length would surely have attracted attention and rubbings made from it should have appeared in some of the large repositories published during the last few decades. We hazard the opinion that it was made for export only, like many inscribed bronzes that turn up from time to time in Western antique shops, and until they are accepted by some reputable collector and published in his catalogue, they remain unknown and unstudied.

A forgery compiled in this manner is not always easy to detect; so many inscriptions contain standard phraseology and identical characters written on the same structural principles.
that the chances of discovering forgeries based on earlier prototypes (each spurious text being built upon extracts from several earlier inscriptions) are few, and the student is indeed fortunate to find cases similar to the present. Plagiarism of this sort is a feature that must be expected in faked texts and the fact that the example studied occurs in a vessel so genuine in appearance is a matter of some importance in governing future attitudes and approaches in studies of other inscribed bronzes. Obviously the physical appearance of the vessel can no longer be held to be a safe criterion of authenticity.

Ins. 212 offers other evidence of forgery: there are a few instances of inconstancy, e.g., 蟒 and 凹; 田 and 丘; the 'woman' elements in 女 and 女; the 'tree' elements in 木 and 木. Several characters are written erratically: 我 for 子; 件 for 村; 我 for 木; 我 for 子. Upon the basis of these alone the inscription is classifiable as a fake. The criteria and suspect features may be enumerated as follows:

(a) inconstancy of character structures,
(b) elements of characters inconstant,
(c) erratically written characters,
(d) incompletely written characters,
(e) elements of single character written as two separate characters,
(f) elements of characters reversed (邱 and 邱),
(g) characters used incorrectly,
(h) meaningless groups of characters,
(i) muddled context,
(j) omission of necessary characters and phrases,
(k) month-quarter term (?),
(l) sources upon which inscription was based are ascertainable.

An average of 10 items per inscription which appear as suspicious features, possibly indicative of forgery, have resulted from the preceding analyses. The inscriptions are in any case definitely proved to be spurious because of inconstancy, thus the problem that now arises is that of determining the value of the various characteristics analysed as possible criteria in their own right. This will be attempted in four stages:

(1) as outlined at the beginning of this Section - the remaining inscriptions exhibiting inconstancy of structures will be similarly analysed, and the resulting items will be listed in Table 2 by means of code letters defined in detail a few pages later on;

(2) in the next Section a group of inscriptions determined as forgeries on the basis of the incorrect use of a particular phrase will be likewise examined, and the suspect items tabulated;

(3) a similar analysis of a further group of inscriptions - all accepted as forgeries by eminent scholars - will be made, and the results again tabulated (Section Five).
In this way a certain degree of control is exercised: the three groups of fakes are each determined as such by unrelated methods; the first on the basis of a peculiarity of the script, the second because of the textual content, while the third group comprises forgeries determined by various means other than the preceding two. If each group maintains a consistent series of suspect features, then these features will require serious consideration as effective criteria of forgery, when applied to the general body of unattested inscriptions. Their ultimate value cannot be definitely assessed as yet, as a fourth stage of research must be completed, namely, the examination of thoroughly attested documents. Attested inscriptions at present available are not sufficient to act as a control; although they support most of the conclusions expressed in this survey, it is necessary to await the publication of a considerably larger body of attested material before attempting final judgement on the value of the suspect items as criteria of forgery. Meantime, the unattested inscriptions will be analysed and the resulting items tabulated for comparative studies as new attested inscriptions become available; in this manner the preparations made in this survey will assist greatly in the speedy determination of the authenticity or the fraudulence of unattested materials during the next few years.

For convenience of tabulation, code letters are assigned to the various criteria and suspect features; these will now be
Fig. 16. Examples of inconstancy of structures in identical characters (marked by asterisks) in vessel-lid inscriptions. The upper two texts form a rare example of the record of different vessel-makers' names in a set of this kind.
listed together with a few remarks regarding the nature and value of each item as far as it is possible to judge at present. Several of the items noted are discussed at length in other pages, thus a certain degree of repetition is unavoidable in the following list which is made complete here for purposes of general reference:

A: character structures inconstant in individual inscriptions. Capital letter signifies extreme cases of one or more characters; a small letter signifies inconstancy in only one case, or of such a kind that it is not sufficient to condemn the inscription without further evidence.

B: elements of characters inconstant in individual inscriptions. Capital and small letters obtain the same significance as A above. This criterion is merely a further application of the principle of constancy and is equally valid as conclusive proof of forgery.

C: inconstancy of identical characters or elements of characters in vessel-lid texts. Each text may exhibit constancy within itself, but as the set was manufactured for the same person at the same time, constancy should prevail throughout both inscriptions.

D: inconstancy of identical characters or elements of characters throughout a series of inscribed vessels made for
Fig. 17. Examples of erratically written characters; those marked by asterisks denote the cases. The bulk of these short texts are classifiable as forgeries on the basis of Jung Keng's criteria discussed in Section One.
the same person. The contents of each inscription may differ somewhat, but providing that the inscriptions are not separated far apart in time, inconstancy should be reasonable proof of forgery at least in the cases of later 'discovered' inscriptions. It is not, of course, proof that the whole series is spurious.

E: erratic writing characters. This is a difficult criterion to apply and until a considerably larger number of fully attested inscriptions becomes available it will not be possible to be certain that all cases suggested in this paper are valid. Our determination of erratic writing is based on (a) fully attested examples, (b) the normal method of writing the characters concerned in the majority of cases, (c) an extensive knowledge and experience gained while copying archaic script during the last three years. The criterion is thus partly scientific and partly subjective in approach. However, in extreme cases such as those illustrated opposite, it may be accepted as definite proof of forgery.

F: normal and mirror-reversed characters in the one inscription. We suggest this as a tentative criterion; no inscription is classed as a fake because of this feature alone in this survey.
Fig. 18. Meaningless groups of characters; cases are underlined and should be considered in relation to the whole context of the inscription. Ins. 9.22 above has been rendered in English as: 'The impersonating son of the Fighting Cock family named Shou issued an imperial edict to Sung. His precious sacrificial vessel.' (An Exhibition of Ancient Chinese Bronzes, Detroit Institute of Arts, vessel no. 37). Meanings may possibly be forced from these 'sentences' but the process involved is quite alien to that required in the cases of the authentic inscriptions.
G: incompletely written characters. Again a tentative criterion which must await confirmation of more fully attested material.

H: elements of single characters written as separate characters. This may be conclusive proof of forgery, but the number of cases involved is small and the inscriptions are all otherwise determinable as spurious manufactures.

I: elements of characters badly displaced, reversed mirror-fashion, upside-down, etc. On the basis of many thousands of fully attested characters we believe this to be a definite criterion of forgery, but its application is limited to only a few examples.

J: characters used incorrectly. This is merely a statistical study of character usage in the corpus of inscriptions; it is of limited value in many cases, but there are certain examples which clearly illustrate the hand of the forger.

K: meaningless groups of characters. Sentences that cannot possibly make sense are examples of careless compilation attributable only to ignorant forgery. Some typical cases are appended opposite - these and similar examples are all accepted as definite evidence of fraud. Many other
examples will be noted in the succeeding Sections.

L: **characters used in the sense of incorrect Sung period interpretations.** Only a few cases are noted as this aspect of our general survey has not yet been completed. Definite cases are irrefutable proof of forgery.

M: **muddled context.** Where it is obvious that the compiler of an inscription has carelessly selected and copied phrases and sentences from two or more different sources (mainly inscriptions available to him) and this has resulted in a confused record, the inscription is a fake. The study of ins. Z1.2 is a detailed illustration of the application of the criterion.

N: **omissions of necessary characters or phrases or additions of unnecessary characters or phrases.** This is again a sort of statistical approach to the characteristics of existing and recorded inscriptions. In some cases it is definite proof of forgery, in others the criterion may require further confirmation.

O: **characters or phrases placed in incorrect positions in the text.** Forged copies of earlier inscriptions often carelessly copied, and the fake is immediately evident because of such misplacement.
F: different characters appearing in later 'discovered' inscriptions of a series containing the same text. In copying an existing inscription the forger may alter the text vitally or unintentionally in cases of one or two characters, and replace them with entirely different ones. It is not a common feature, thus the application of the criterion is limited.

Q: reversed sun-tsu phrase. All cases will be examined in the next Section.

R: reverse-merits phrase. All inscriptions containing the phrase are enumerated and discussed generally later in Section Six; meantime, occurrences of the phrase are noted although they are not all necessarily definite evidence of forgery.

S: month-quarter term. Occurrences are noted, but it is not applied as a criterion of forgery, (see Appendix A for discussion on this term).

T: reversed tsun-bao phrase. There are only a few inscriptions with the characters 'precious and honoured' reversed. It is possibly evidence of forgery and is tentatively accepted as a criterion in this paper.

U: copy of pre-existing inscription text. This refers to
inscriptions which are obviously faked copies of earlier existing or recorded inscriptions. It is to be applied also to forgeries wherein phrases and sentences are reliably evident as copies based on various earlier originals.

W(1): inscription reads from left to right - characters normal.

W(2): inscription reads from left to right - characters reversed mirror-fashion.

W(3): inscription reads from right to left - characters reversed mirror-fashion.

W(1) and W(3) are featured in only a few inscriptions and are classed as possible forgeries; W(2), however, is not fully applicable as evidence of forgery; numbers of earlier recorded inscriptions written in this way are otherwise proved to be spurious, but fully attested examples of such reversed texts have recently been found.

X: earliest 'discovered' (i.e., earliest published) inscription of a series is proved spurious, therefore later 'discovered' inscriptions of the same series are fakes. This is a straightforward matter which requires little comment; usually the later imitations also exhibit evi-
dence of forgery. Sometimes, however, the later inscrip-
tions exhibit considerable improvement in the exec-
cution of the script, and occasionally discrepancies 
in the text are 'corrected'. 
TABLE No. 2.

Analysis of Inscriptions Exhibiting Inconstancy of Character Structures.

An asterisk* placed beside the code letter denotes uncertainty regarding the item. The present and succeeding Tables of suspect features are divided into three groups: code letters A - I which are concerned with the script, J - P denoting discrepancies in the text of the inscriptions, and Q - X comprising suspect terms and miscellaneous items. Inscriptions are placed in numerical order and also in a chronological order according to catalogue groups.

The reader may observe, upon examination of the Major Table, that vessel-lid texts manifesting inconstancy of identical characters (code letter C) and series of vessels with inconstantly written characters throughout the series (code letter D) tend for the most part to exhibit numbers of suspect features in much the same way as the inscriptions in the following list.
<table>
<thead>
<tr>
<th>No.</th>
<th>S.</th>
<th>T.</th>
<th>Analysis of Inscriptions Exhibiting Inconstancy of Character Structures.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>.222</td>
<td>AB</td>
<td>E</td>
</tr>
<tr>
<td>2.</td>
<td>.204</td>
<td>AB</td>
<td>EF</td>
</tr>
<tr>
<td>3.</td>
<td>.156</td>
<td>AB</td>
<td>E</td>
</tr>
<tr>
<td>4.</td>
<td>.151</td>
<td>aB</td>
<td>EF</td>
</tr>
<tr>
<td>5.</td>
<td>.131</td>
<td>.B</td>
<td>EF</td>
</tr>
<tr>
<td>6.</td>
<td>.120</td>
<td>ab</td>
<td>DF</td>
</tr>
<tr>
<td>7.</td>
<td>.110</td>
<td>aB</td>
<td>EFG</td>
</tr>
<tr>
<td>8.</td>
<td>.104</td>
<td>aB</td>
<td>DE</td>
</tr>
<tr>
<td>9.</td>
<td>.100</td>
<td>ab</td>
<td>DE</td>
</tr>
<tr>
<td>10.</td>
<td>. 69.2</td>
<td>ab</td>
<td>dE</td>
</tr>
<tr>
<td>11.</td>
<td>. 69.3</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>12.</td>
<td>. 62.</td>
<td>.B</td>
<td>E</td>
</tr>
<tr>
<td>13.</td>
<td>. 41.1</td>
<td>aB</td>
<td>EGH</td>
</tr>
<tr>
<td>14.</td>
<td>. 33.1</td>
<td>aB</td>
<td>F</td>
</tr>
<tr>
<td>15.</td>
<td>.500.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>16.</td>
<td>.395.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>17.</td>
<td>.349.1</td>
<td>aB</td>
<td>EFG</td>
</tr>
<tr>
<td>18.</td>
<td>.285.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>19.</td>
<td>.195.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>20.</td>
<td>.162.1</td>
<td>aB</td>
<td>DE</td>
</tr>
<tr>
<td>21.</td>
<td>.144.1</td>
<td>aB</td>
<td>EF</td>
</tr>
<tr>
<td>22.</td>
<td>.115.1</td>
<td>ABCDE</td>
<td>MN</td>
</tr>
<tr>
<td>23.</td>
<td>.104.1</td>
<td>aB</td>
<td>S</td>
</tr>
<tr>
<td>24.</td>
<td>.104.3</td>
<td>ABCDEF</td>
<td>M</td>
</tr>
<tr>
<td>25.</td>
<td>.103.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>26.</td>
<td>. 98.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>27.</td>
<td>. 92.4</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>28.</td>
<td>. 92.2</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>29.</td>
<td>. 88.1</td>
<td>aB</td>
<td>EFG</td>
</tr>
<tr>
<td>30.</td>
<td>. 84.1</td>
<td>aB</td>
<td>DE</td>
</tr>
<tr>
<td>31.</td>
<td>. 74.3</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>32.</td>
<td>. 50.3</td>
<td>aB</td>
<td>EFGHI</td>
</tr>
<tr>
<td>33.</td>
<td>. 31.6</td>
<td>aB</td>
<td>EF</td>
</tr>
<tr>
<td>34.</td>
<td>. 25.17</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>35.</td>
<td>. 25.12</td>
<td>aB</td>
<td>DE</td>
</tr>
<tr>
<td>36.</td>
<td>538.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>37.</td>
<td>280.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>38.</td>
<td>260.1</td>
<td>aB</td>
<td>dEFG</td>
</tr>
<tr>
<td>39.</td>
<td>148.1</td>
<td>aB</td>
<td>EFG</td>
</tr>
<tr>
<td>40.</td>
<td>131.2</td>
<td>aB</td>
<td>EF</td>
</tr>
<tr>
<td>41.</td>
<td>129.1</td>
<td>aB</td>
<td>E</td>
</tr>
<tr>
<td>42</td>
<td>110.3</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>43</td>
<td>100.6</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>44</td>
<td>89.2</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>45</td>
<td>88.2</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>46</td>
<td>83.1</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>47</td>
<td>74.1</td>
<td>.</td>
<td>.</td>
</tr>
<tr>
<td>48</td>
<td>71.2</td>
<td>A</td>
<td>B</td>
</tr>
<tr>
<td>49</td>
<td>66.1</td>
<td>A</td>
<td>C</td>
</tr>
<tr>
<td>50</td>
<td>52.4</td>
<td>B</td>
<td>.</td>
</tr>
<tr>
<td>51</td>
<td>41.7</td>
<td>B</td>
<td>E</td>
</tr>
<tr>
<td>52</td>
<td>37.6</td>
<td>B</td>
<td>E</td>
</tr>
<tr>
<td>53</td>
<td>31.4</td>
<td>B</td>
<td>.</td>
</tr>
<tr>
<td>54</td>
<td>29.5</td>
<td>B</td>
<td>.</td>
</tr>
<tr>
<td>55</td>
<td>27.9</td>
<td>B</td>
<td>.</td>
</tr>
<tr>
<td>56</td>
<td>23.18</td>
<td>A</td>
<td>B</td>
</tr>
</tbody>
</table>
SECTION FOUR.

The Reversed Sun-Tzu Phrase.

In the Tso Chuan we are told something of the purpose in recording events in inscribed bronzes:

'... What should be engraved on such articles is - for the son of Heaven, his admirable virtue; for the Prince of a State, a record of his services estimated according to the season in which they have been performed; for a great officer, his deeds worthy of being mentioned. And such deeds are the lowest degree (of merit so commemorated). If we speak of the time (of this expedition) it very much interfered with (the husbandry of) the people; - what was there in it worthy of being engraved? Moreover when a great state attacks a small one and takes the spoils to make an article the regular furniture (of the ancestral temple), it engraves on it its successful achievements to show them to posterity (戸 孫) at once to manifest its own bright virtue and to hold up to condemnation the offences of the other ....' (Hsiang, 19th year. Legge, p. 483-7).

A large number of inscriptions - if they are genuine - testify to the accuracy of much of this account. Not only were the inscribed vessels created in order to keep alive the meritorious deeds of their authors for future generations, they were also a means of ensuing that the strict locus standi of personal and public relationships would be forever safeguarded. The inscriptions often record details involving
the use of terms of personal relationship and with only one exception a strict order of precedence is observed: 'deceased grandfather' (or ancestors generally) always precedes 'deceased father'; deceased parents are named in the order of 'father' - 'mother'; the descendants to whom the inscription is addressed appear as 'sons and grandsons'. A chronological order is maintained in respect to different generations, while persons of the same generation follow each other according to their respective status in the family:

ins. 27.9.

1. (I), T'o-Po-To-Fu, have made this precious Kuei-vessel
2. to be employed in sacrifice to my august deceased grandfather and my accomplished deceased father
3. and to be employed in the bestowal of longevity. May for a myriad
4. years, (my) sons and grandsons forever preciously employ it in sacrifice.

ins. 27.10.

1. (I), Chung-Cha-Fu, have made for my august deceased father,
2. X-Po (and my) august deceased mother X-chi, (this) honoured
3. Kuei-vessel. May for a myriad years (my) sons and grandsons,

4. forever preciously employ (it in) sacrifice in (our) Ancestral Temple.

Numerous other examples might be cited in which the 'sons and grandsons' phrase would amount to several hundreds of examples; in the cases of 48 inscriptions of Chou, however, the order of the characters is reversed to 'grandsons and sons' for no apparent reason. Familiar as we are with the propensity of Chinese to maintain a strict precedence in both personal and public relationships, it is indeed strange to discover so commonly used a term reversed in this way, particularly in an aspect of family institution. Obviously sons should precede grandsons both in age and in rank; if the order is reversed the concept of 'descendants' is expressed quite illogically.

Early in our study of bronze texts we suspected that the reversed sun-tzu phrase might be found to be a criterion of forged inscriptions, and expected sooner or later to find some comment regarding it in the numerous studies made of this material, but we have not yet discovered any Chinese or Western

---

1. It is illogical not only because 'sons' must be begotten before 'grandsons', but also because the term refers to potential members of the family; deceased members are, without exception, recorded in order of precedence; so, too, should unborn generations be referred to in the order in which they will appear.
scholar who has questioned, let alone adequately discussed, the significance of this phrase.

Bronze texts employ the phrase (reversed and normal) in the last lines of the inscription in the form of a prayer requesting that the compiler's descendants will cherish and employ the vessel in the ancestral temple. The phrase is usually written: 甲 甲, the two small strokes denoting repetition of each character; i.e., 子 子 子 子 which we translate as 'sons and grandsons' or 'descendants'. In a short inscription recorded in the K'ao ku Catalogue (2/7b) the phrase is thus in four characters - it is, however, the only example in the bronze inscriptions. In pre-Sung period sources there are three recordings (in modern characters) of the texts of bronze vessels discovered in Han and later times which contain the characters 子 子; two of these have the characters repeated as 子 子 子 子. Occasionally the same doubling is found in the traditional texts of the Chou period. A recently discovered vessel (ins. 1462) which we consider to be authentic has this phrase written as: 子 子 子 子 其 永 用 止.

2. See Juan Yüan's introductory study of Bronze Vessels of Shang and Chou', Chi ku Catalogue pp. 4–5. The doubling of characters in the recorded texts would have been effected in the original inscriptions by means of the repetition mark. Since Sung times many thousands of inscribed vessels have been 'discovered' and not a single example can be found of a four character 'descendants' phrase; obviously, the two early recorded phrases have been expanded as the repetition mark was not used in general literature. The sole example in the Sung Catalogues is no doubt a forgery; character structures give cause also to suspect the inscription.
Fig. 19. Occurrences of the reversed sun-tzu phrase in the Shih ching together with Karlgren's reconstructions of the relevant archaic sounds.
This would be interpreted as: 'sons of (my) sons, grandsons of (my) grandsons, may they forever employ it'.

In the traditional texts of Chou period origin the normal tzu-sun phrase often appears; there are only a few instances where it is reversed, in each of these cases, however, it is included in a quotation from the Shih ching. In this latter text there are 9 occurrences of the reversed sun-tzu phrase; these are appended opposite together with the reconstructed archaic sounds of the relevant rhymes according to Karlgren. It is quite obvious that the reversal is made for the purpose of rhyme only.\(^3\)

Han period mirror texts are for the most part written in rhyme and contain many examples of both the normal and the reversed phrase. In some 250 texts appearing in bronze mirrors, collected by Karlgren in his article, *Early Chinese Mirror Inscriptions* (B.M.F.E.A. No. 6), there are over 70 cases of the normal tzu-sun phrase and 15 cases of the reversed phrase. In every case the reversal is made for purpose of rhyme. Although the mirror inscriptions are all of Han period origin they comprise the largest collection of texts employing both phrases in early post-Chou literature, and are thus a valuable and additional control in assessing the significance of the reversed sun-tzu phrase. The relevant sections of the mirror texts with the

---

3. The use of 'refrain' technique as evidenced in two of the passages illustrated is a normal feature of the Odes - if the sun-tzu phrase were not reversed but the character 'sun' was required for rhyme, the 'refrain' would have maintained the normal order. This technique does not affect our conclusions that in the Shih the reversal is purposely made.
Fig. 20. Reversed sun-tzu phrases in Han period mirror texts. The first group comprises all cases of the reversed phrase, all obviously reversed for purpose of rhyme; the second group is a selection of normal tzu-sun phrases in which 'sun' is part of the rhyme pattern - numerous other cases of the normal phrase have no connection with the rhyme and the natural order of the characters is maintained. The last group is a selection of other phrases reversed in order to effect rhyme, they offer strong support to the arguments in this Section for they also never occur in prose text reversed in this manner.
rhyming characters romanised according to Karlgren's reconstructions appear opposite; it will be observed that several of the normal tzu-sun phrases are also in positions of rhyme, the remaining examples which are not incorporated in this list do not exhibit rhyme at all.

The term 'descendants' occurs in many of the traditional texts of the Chou period; it is certainly not a rarely expressed meaning, and thus from the point of view of a statistical approach we are justified in questioning the reliability of the inscribed bronzes which contain the only examples in Chou literature of un-rhymed reversal of the phrase. There seems to be sufficient evidence in the materials referred to and quoted, to illustrate that the reversal of this particular phrase was purposely done only in poetry where the character ट was required to complete the rhyme. Because the two characters were originally combined to form the meaning of 'descendants' in a logical manner, i.e., the order of 'sons' followed by 'grandsons' - who could only be begotten by 'sons' - it seems further justifiable to state that the correct term in prose must be tzu-sun. If found reversed in a prose text, it must be regarded as a scribal error; mistakes of this nature, however, could only occur when the compiler of the text copied from a source containing the sun-tzu phrase reversed for purposes of rhyme without being aware of the fact. It is inconceivable that a Chou
period artisan or scribe could err so badly when writing a common every-day phrase - he certainly would not need to consult a copy of the *Shih ching* when compiling this portion of an inscription and thus mistakenly copy the reversed phrase. So deeply ingrained is the natural order of 'sons and grandsons' in the Chinese mind that we may note a definite tendency to return the reversed phrase to its natural order in several instances to be discussed later in this paper.  

An Eastern Chou inscription (113.1) contains the reversed phrase in a position of rhyme. It is the only definite example amongst the Chou bronze texts. In the Sung Catalogues 5 inscriptions employ the sun-tzu phrase of which one is classifiable as Eastern Chou, the others are Western Chou in style. The early Ch'ing Catalogues contain 8 Western Chou inscriptions and one of Eastern Chou style with the reversed phrase; 7 others cannot be chronologically classified on the basis of the contents. Late Ch'ing Catalogues contain 5 Western Chou inscriptions with the sun-tzu phrase. Recent Catalogues contain 9 Western Chou texts, 4 Eastern Chou and 9 short unclassifiable ones with the reversed sun-tzu phrase. The large number of Western Chou cases, if faked, is to be expected for the *Shih ching* odes quoted earlier are usually considered to date in the

---

4. Ins. T.80.1 (v.c.) offers a most interesting case; the six inscriptions containing this text all employ the normal descendants phrase but in (v.c.) the character 'tzu' was almost written as 'sun' and the error was not corrected in the vessel model - 'tzu' appears as $\frac{\text{tzu}}{\text{sun}}$ and is followed by a fully drawn $\text{sun}$.
early reigns of the dynasty; it is interesting to note, too, that Eastern Chou examples are few in the earlier catalogue groups and only in recent times is there any marked increase to be observed. Altogether 26 Western Chou inscriptions, 6 Eastern Chou inscriptions and 16 unclassifiable ones have employed the reversed sun-tzu phrase in prose text.

There can be little doubt that the reversed sun-tzu phrase is, indeed, proof of forgery if found employed in prose texts; stanzas of the Shi ching incorporating the phrase reversed on account of rhyme requirements may be found quoted in prose (c.f. Meng, i. 7/5 and Tso chuan, Ch'ao 28th year), but there is neither reason for, nor example of, its reversal as a term, 'descendants', in any prose text other than the bronze inscriptions assembled in this Section. Amongst the bronze texts the term appears in several hundreds of inscriptions written in the order of tzu-sun; the exceptions noted here comprise a very small percentage of the total number of cases.

The Ts'ai bronzes excavated in Anhui last year offer further support in the reversal of דברות, a compound which elsewhere appears only in the normal order. In the bell text, ins. 32.1, the character 本书 is made to rhyme

5. Transcriptions and commentary by Kuo Ho-jo together with reproductions of rubbings appear in the Hsiao ku hsiih pao, vol. II, pp. 1-6. The inscriptions are studied in detail by us in Section Six. Kuo dates the grave in the mid-fourth century B.C.
with the characters 王, 匏, 慶, and possibly 聯; the principle involved is precisely that discussed in respect to the reversal of the tzu-sun phrase.

In analysing the 48 inscriptions with the reversed phrase, we have not attempted to present a full account in each case of every suspect feature evident, but discuss at length particular items of interest. The Table at the conclusion of the Section exhibits a complete account of the analyses. Special care is taken to incorporate all available 'duplicates' of each inscription text - i.e., vessel-lid sets, series, and faked copies.

The Reversed Sun-Tzu Phrase in Sung Catalogue Inscriptions.

1. ins. S.36.7 The Shih Yu Yi.

1. The King, you. two? upper? marquis. Shih-
2. Yu followed the King night ....
3. Awarded Shih-Yu (with) metal. Yu
4. thereupon responded extolling his virtue.
5. Therefore has made (for) his accomplished deceased father (this)
6. precious Yi-vessel. Grandsons and sons value (it).

Reproductions of the inscription occur in five of the Sung Catalogues: the Po ku Catalogue (6/35b), the K'ao ku Catalogue
(4/17b), the Li tai Catalogue (p. 186a), the Hsiao t'ang Catalogue (p. 26a) and the Fu chai Catalogue (p. 17b). The last catalogue contains a reproduction of a rubbing taken from an entirely different original to that appearing in the other four catalogues; Juan Yüan has recorded in his Chi ku Catalogue (4/18b) a copy of this same inscription written in four lines instead of six. The variant text exhibits certain marked differences other than the arrangement of characters in four lines: which cannot be deciphered, replaces 'to follow'; is written for ; for ; 其 for 用 (line 3); (a particularly bad rendering of the archaic form); 鼎 for ; and an extra character, is added to the end of the last line. Other slight differences in character shapes and structures may be noted upon close examination. There can be little doubt that the variant text is a late Sung period faked copy of the earlier recorded inscription first published in the K'ao ku Catalogue, probably appearing in a different vessel-type. Chinese scholars have opined that forgery of this kind took place in Sung times and that such fakes are easily detected when compared with the original inscriptions.\(^6\)

6. The character 楊 is always written with the 丸 'radical'; the Fu chai Catalogue inscription is the only example employing the 氤 'radical', thus creating the character 楊 which is quite inappropriate in this context.

7. See extract from Hsu Chung-shu's article quoted earlier, p. 550.
The first line of the text cannot possibly make sense; the characters: 'King' - 'you' - 'two' (or possibly 'upper') - 'marquis', placed in this order, are intended to be a sentence. Each character is often used throughout the inscriptions in various contexts, but nowhere are they to be found in any combination similar to this; even if the 'loan' character theory were applied, it seems quite doubtful that an acceptable meaning would result. In the second line the two characters 夜 and seem similarly defiant of interpretation although the second one has not been deciphered. Older commentators transcribe it as 夜 and in the case of the variant text form of 夜 regard it as 'engraved arrows' by an ingenious suggestion that the 'jade' radical of the first character is combined with the second to represent this compound in the form of a single character (Fu ch'ai Catalogue, p. 17b). Happily for students of Chin Shih Hsüeh this questionable method of interpretation, notwithstanding its marvellous possibilities of solving almost any textual problem, is not often resorted to by later commentators.

In line 4 the use of the characters 剔 (i.e. 'then') and 卜 (i.e. 'reign') in this section of the inscription text (we generally refer to the sentence type as 'extol phraseology') is limited to the present inscriptions. There is nothing wrong from the point of view of character usage, but the 'King's
grace' or the 'King's beneficence' etc. form the object of 楊 in all other examples of this sentence; to refer to the King by means of a mere pronoun here does not appear to be correct. The same pronoun employed in line 5 must refer to the investee, Shih Yi; in all but 4 other cases of the 'ancestor phraseology' the pronoun 彝 is used while in several cases no pronoun appears at all. It is, furthermore, a very rare feature that the investee should omit to record the name of his 'accomplished deceased father'.

The two inscriptions present, thus, several common features which cause us to suspect their fraudulence without reference to the reversed sun-tau phrase in the last line of the text:

(a) meaningless groups of characters masquerading as sentences,
(b) certain characters used incorrectly,
(c) omission of necessary characters or phrases.

The first item may be accepted as a reliable proof of forgery if applied carefully. Fully attested inscriptions and other authentic documents often contain untranscribable characters, or characters which may be rendered into a modern form whose meaning is not yet ascertainable; the general structure of the phrases or sentences in which they appear, however, is such that it is perfectly obvious that the text originally read smoothly and sensibly. If the unknown characters were under-
stood, the sentences would express meaning clearly. The example in line 1 of the present inscription manifests no such feature; it may be thought that the difficulty lies in the absence of necessary 'radicals' or 'phonetics' in the characters concerned but again we may turn to fully attested materials and discover the actual nature of the archaic script in this respect. Characters in pre-Ts'ìn times differ little from modern forms as far as their general structure is concerned; 'radical' + 'phonetic' combinations were quite commonly used, and in such documents as the Ch'ü Silk Manuscript and the Bamboo Texts of Changsha, the characters exhibit a very advanced stage of evolution. If the student is fully familiar with the attested examples and has examined them as a group, leaving aside, meantime, his knowledge of the peculiarities of the unattested texts, he will be in a position to observe immediately the faulty structures of many 'sentences' in the unattested texts, and will note also character usage which does not seem to be at all correct. In expressing our opinion that a certain group of characters is not a sentence but merely a jumble of nonsense, we take into consideration the points just discussed.

Generally we disregard the 'loan' character theory, for there

---

8. This matter is considered in more detail in Section Six with reference to the script employed in attested documents; reproductions of most of these inscriptions are appended in Section Two and in Section Six.
is no evidence of such a loose form of written expression in fully attested texts - the very nature of the archaic characters would limit so primitive a principle of expression to only a few cases. 9

Items (b) and (c) may not be definitely stated to be criteria of forgery except in special cases; examples will be considered from time to time in appropriate inscriptions. If it is a normal feature of the bronze texts to use the characters 王 or 天子 in reference to the King in the 'extol phraseology', but in only a few inscriptions the pronoun 夫 appears instead, the exceptions, even though 'grammatically' correct, should be viewed with suspicion. Whether they are indicative of forgery cannot always be decided; the present case exemplifies the problem for it is one of the very rare occurrences in the bronze literature, and it may be argued that genuine inscriptions discovered in the future may refute the

---

9. A careful and detailed study of the fully attested texts will result in a definite impression that 'loan' character usage was practically unknown to the writers of these undeniably genuine documents. The application of this method of interpretation seems to have originated in the Han period when scholars were faced with the problems of deciphering the ku wen classics reported to have been discovered at various times. As the reforms of Li Ssu resulted in a marked change of elements in numerous characters, the Han scholars in attempting to parallel them with the existing script, probably opined that such and such an archaic character in the newly discovered texts was used for the current form - this would be but a short step towards the 'loan' character theory which in Chin Shih Hsueh is so extravagantly applied. This point is considered in more detail in Section Six.
criterion. However, where the exceptions are limited to a small number of cases in the midst of many hundreds of examples of normal usage it would be most unlikely that the criterion so established would later be found invalid.

A further suspicious feature may be noted here: characters in the bronze inscriptions tend largely towards certain standard forms, e.g.  is written as ,  or  in the majority of cases; when a character like  appears, we cannot but seriously consider dismissing the inscription as a fake, for it is obvious that the upper strokes of the character illustrate the writer's ignorance of the 'correct' archaic form. Sometimes fully attested script examples may assist us in deciding what is a correct structure and what is merely a post-Chou creation. Generally, however, we base our opinion on the form of character usually found; those that deviate greatly from this and in doing so exhibit an illogical structure will be tentatively classed as a feature of forgery. The character  in the present text is normally written with a right-

10. Exactly how far we may interpret statistical facts of this nature is a problem that may not be capable of solution for many years. If we are fortunate enough to obtain, in the near future, three or four scores of inscriptions of 20 or more characters in length (all fully attested), such a body of material will possibly indicate more clearly the potential value of several of the suggested criteria noted throughout this paper. When the numbers of fully attested inscriptions of Chou are counted in hundreds the validity of the suggested criteria which still hold will be definitely assessable.
hand 'hand' element; the element here is an imperfectly formed 
hand element which is generally restricted to the character 
握 (握). Only three or four inscriptions illustrate 
this 'error'.

An illustration of the vessel appears in the K'ao ku Cata-
logue and in the accompanying commentary the similarity of the 
vessel, with its elephant motive in the decor, to one in the 
Li t'u ('Illustrations of Ceremonial Objects') is noted, but 
because this work does not record a Yi-vessel with the same 
decor motive (only a Tsun-vessel with elephant decor is described 
and illustrated), the commentator expresses his opinion that 
the Li t'u is not an exhaustive record of bronze vessels. No 
doubt this sentiment is correct, but how well it illustrates the 
ease in which clever forgeries in Sung times came to be accepted 
as genuine vessels.

Recent Chinese scholars do not incorporate ins. S.10.7 in 
their published studies; is it possible that they privately 
view it as a spurious text? *

2. ins. S.41.1 The Ch'u Kung Yi 
Fu-vessel.

1. In the eighth month, on the day, chia-shen, 
Ch'u Kung Yi himself made (this) 
[Il.1] 11. night, rain, thunder Fu-vessel. Its text (?)

11. The two characters 'rain' and 'thunder' may possibly be 
argued to represent the single character 'thunder', i.e., the
states eight

3. Kung Yi may he for a myriad years.

longevity

4. Grandsons and sons may they forever cherish (it).

This bell is said to have been discovered in Chia Yü Hsien near Wu Ch'ang in the third year of Cheng Ho (Northern Sung, 1114 A.D.); various details of general interest are presented in Juan Yuan's edition of the Fu ch'ai Catalogue which contains block prints taken from rubbings of two different originals. There is at least one extant bell of unusual design incorporating a fairly exact copy of the reproduction in the Fu ch'ai Catalogue (p. 33a); that this inscribed bell (San tai 1/20a) is a third original is fully evident upon comparison with the rubbings reproduced by Juan. It is without doubt a forged copy of recent times; we suspect also that the first inscription in the Fu ch'ai Catalogue is a copy made on the basis of the second - a rather careless attempt was made to incorporate even the corroded areas. Although the second reproduction forms the basis of the ensuing observations, the comments made are equally applicable to the other two copies.

In fully attested documents of Chou there is not a single instance of such a feature; although we have not translated accordingly, we believe the writer originally intended the two elements to be the character 'thunder'.

**241**
Fig. 21. Ins. S. 411, traced in reverse to illustrate inadequacies in the script. The tracings are taken from the two reproductions in the Fuchai Catalogue; it is fully evident upon close comparison that the rubbings have been made from two different originals - note varying placement and balance of individual characters and the nature of the patination.
The script is very roughly executed and the immediate impression gained by the discerning student is one of doubt, especially after a perusal of the authenticated documents of Ch'u. The text is reversed mirror-fashion and reads from left to right; for convenient comparison with other documents a reversed copy of the original is appended - the text thus appearing normal and exhibiting more clearly the imperfections of the script. Mirror-reversed texts have been excavated under scientific conditions at Hsin Hsien (ins. 1.12 and 3.9) appearing on portions of weapons; such a characteristic might be expected on objects of small size which were produced in large quantities. The recently discovered ins. 2.19 appears as a mirror-reversed text and thus such a phenomenon must be expected in genuine inscriptions; amongst the general body of inscriptions, however, there are less than a score of mirror-reversed texts.

12. These are listed under note 9 in Section One (ins. 2.1 to 22.7 and 2.12); compare also the script of the Bamboo Texts and the Silk Document; a particularly bad error is to be observed in the writing of the character 'Ch'u' of which numerous authentic examples are available in Ch'u as well as in Middle States documents (e.g. ins. 61.1 and the pottery seal texts).

13. It is possible, however, that the reproduction of this rubbing may be mistakenly reversed during the photographic process of making the printing block. For this reason the feature is later listed as a tentative criterion of forgery. To produce an intaglio text reversed mirror-fashion is not easy unless the text were originally written reversed; this feature appears in oracle bone inscriptions and the reason for it has been determined. Why it should appear in bronze texts is, however, a problem difficult to solve.
of any considerable length and most of them exhibit criteria proclaiming their fraudulence.

Several characters are written erratically e.g. 森 for 森; 森 for 森; 森 for 森; 魔 for 魔; with the exception of 森 there are several examples of each character in various attested documents illustrating the normal form of writing. Unless we subscribe to the general view that characters in pre-Ts' in times were written confusedly from one locality to another, or even by different scribes in the same locality, there can be no acceptable explanation for the above features other than the possibility that we have here the results of ignorant forgery of later periods. The basic structure of the archaic characters could only have become confused in this way by one unused to reading or writing in the script. Examples of a similar form of error are to be noted in Western drawn illustrations containing Chinese characters; the artists, knowing nothing of the script, produce clumsy...

---

14. e.g. ins. S. 7.1 (v.k), T. 50.1, T. 18.4, 21.19, 18.3. Four other cases: 46.1, 33.2, 28.2; and 1019, are not immediately evident as forgeries.

15. This matter is discussed at length in the concluding section of the survey; we merely remark here that fully attested inscriptions now available for study support the views expressed of the 'standard' nature of the archaic script both from a geographical and a chronological point of view. It is, of course, a tentative theory that the basic structures of characters and elements of characters were (with some exceptions, no doubt) standard throughout the Middle States and Ch' u. Until reliable evidence to the contrary appears our theory must receive serious consideration.
copies exhibiting a complete unawareness of the principles of writing - the characters may be recognisable but many inconsistencies in structure occur. Many forgeries were made by men to whom the archaic script was equally alien, as modern Chinese is to unenlightened Western artists.

Inconstancy of character structure obtains in the cases of the characters  and  and has been maintained throughout the three inscriptions. A most unusual feature to be noted is the presence of small characters between lines 2, 3, and 4; in some cases these may have been intended as elements of the nearby characters. In the oracle bone texts of Shang, numerals and certain divination phraseology are similarly placed in many inscriptions, but it is certainly not a characteristic of Chou period inscriptions.

Unfortunately it is not possible to transcribe all the characters of lines 2 and 3; the first four characters of line 2 present, we believe, reasonably certain proof of forgery. Not only is the writing of the two elements of 'thunder' as separate characters a feature completely absent in all attested inscriptions, but the resulting text also must be classed as a meaningless group of characters. The tendency to write individual elements of characters far apart is particularly noticeable in the last half of line 2.

Features causing us to suspect the fraudulence of the three inscriptions may be enumerated as:
(a) meaningless groups of characters,
(b) characters used incorrectly,
(c) inconstancy of character structures,
(d) erratically written characters,
(e) mirror-reversed text (?),
(f) incompletely written characters,
(g) elements of single characters written as two separate characters,
(h) general appearance of inscription.

The small inter-line characters will be disregarded as there is no other inscription with this feature. It is indeed rare to discover so many doubtful characteristics in one bronze text; item (c) proves conclusively the fraudulence of the inscription; (a), (b), (d) - (g) are not definite criteria but are features commonly found in suspected bronzes and in accepted forgeries. Items (f) and (g) are completely absent in fully attested documents; Table 6 following the next Section illustrates well the prevalence of the above items amongst inscriptions generally regarded as fakes. The last item is merely a subjective approach and can only be regarded as a loose form of supporting evidence.

3. ins. S.65.2 The Ta Fu Shih Ting.

1. In the third month, in the first quarter of the month, on the day, chia-yin,
2. the King was in the Ho Ancestral Temple, Ta-Fu-Shih
3. awarded the associate (called) Hai. The King was in the Hua Ancestral Temple, Shih
4. Temple .... The King was in the Pang Ancestral Temple. Shih
5. exhibited merit. Awarded .... awarded a jade insignia. The King
6. was in Pang. Awarded the associates called Hou, called
7. T'iao. Ta-Fu-Shih dared to respond and
8. extol the Son of Heaven's grace. Therefore made (for) accomplished
9. deceased father, Jih-Yi, (this) precious Ting-vessel, grandsons and sons
10. forever preciously employ (it).

Three Sung Catalogues contain reproductions of this inscription: the Hsiao t'ang (92a-b), the Li tai (89a-b), and the Hsü k'ao (4/3b) Catalogues; each reproduction exhibits marked differences of a type seldom found in identical inscriptions illustrated in two or more of the early catalogues. The Li tai Catalogue and the Hsü k'ao Catalogue were both first published in the mid 12th century, but the two rubbings are obviously
taken from two different originals; that of the Li tai Catalogue has a total of 65 characters arranged in 9 lines of 7 characters each and a tenth line of 2 characters. Two of the 65 characters are not drawn. The Hsü k'ao Catalogue rubbing has 7 characters in each of the first 7 lines, 8 in line 8, 6 in line 9, and 2 characters in the last line; only one character is left undrawn; the total number of characters is also 65. Instead of appearing at the end of line 9, the character 永 is placed at the head of line 8! Characters are drawn in the typical clumsy manner found throughout this catalogue; they may possibly reflect the incompetence of the compiler (or of the original blockmaker), but it is equally possible that the inscriptions from which they were copied manifested the same badly constructed characters. The Hsü k'ao Catalogue inscription is a poor imitation of the Li tai Catalogue illustration.

In the later published Hsiao t'ang Catalogue a further rubbing appears containing a total of 64 characters (易 in line 6 is omitted); each of the first six lines contains 7 characters; line 7 has 6 characters, line 8 has 7.

16. It has already been observed that faked imitations of existing inscribed vessels were manufactured by unscrupulous people in Sung times and the fact, as we have illustrated earlier, has been known to Chinese scholars for a considerable time. To the best of our knowledge, no previous scholar has studied the Sung Catalogues comparing identical texts (noting also characteristics of the script in various editions) in an attempt to discover the extent of imitative forgery recorded in the six catalogues. Inscriptions surveyed in this portion of our work present some indication of the results that will obtain when an exhaustive examination of the Sung Catalogues is undertaken.
<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1)</td>
<td>(3)</td>
<td>(6)</td>
<td>(9)</td>
<td>(11)</td>
</tr>
<tr>
<td>(2)</td>
<td>(4)</td>
<td>(7)</td>
<td>(10)</td>
<td>(12)</td>
</tr>
<tr>
<td>(5)</td>
<td>(8)</td>
<td>(13)</td>
<td>(14)</td>
<td>(15)</td>
</tr>
</tbody>
</table>

Fig. 22. Ins. S. 622, Sung period copies.
line 9 has 6, while the last line contains 3 characters. The
inscription texts in the first two catalogues read from left
to right; the Hsiao t'ang Catalogue text reads from right to
left. Characters in each inscription are normal. It seems
that the Hsiao t'ang Catalogue text is a better class fake
based on the Li tai Catalogue inscription, correcting the di-
rection of reading but carelessly omitting a character.

Identical characters from two editions of the Hsiao t'ang
Catalogue, three of the Li tai Catalogue, and one of the Hsü
k'ao Catalogue are appended opposite; the editions are:

A. Sung period edition of the Hsiao t'ang Catalogue
   as reproduced in the Hsü ku yî ts'ung shu,

B. Ch'ing period red ink edition based on a Ming
   copy of the Hsiao t'ang Catalogue,

C. Ming 1589 red ink edition of the Li tai
   Catalogue,

D. Yü Hsing-wu's lithographic reprint of the Ming
   Ch'ung Chen edition of the Li tai Catalogue,

E. Ch'ing period edition of the Li tai Catalogue
   undated,

F. Ch'ing period edition, undated, of the Hsü
   k'ao Catalogue.

Some interesting observations may be made: the three original
inscriptions each exhibited inconstancy of character struc-
tures (c.f. characters 26 and 37, 41 and 56, 53 and 63) but the
Hsiao t'ang Catalogue text has further cases (c.s. 16 and 39,
11 and 27). In successive editions of the same catalogue there
is a definite tendency to maintain character shapes and structures correctly, but even if slight variations occur, the feature of inconstancy is adhered to where it appeared in the original inscriptions. The three groups of catalogue editions studied thus side by side show quite clearly that three different original inscriptions are involved.

Our following discussion on the text will be based on the Sung edition of the Hsiao t'ang Catalogue which is the most reliable of the Sung Catalogues; we cannot be sure, of course, that the original inscription copied was manufactured earlier or later than the other two. However, as the three texts are identical in a general way, our comments on the Hsiao t'ang Catalogue text are almost equally applicable to the others. Recurring characters appear with varying structures, e.g. 士 and 安; 彳 and 𠘊; 一 and 一 (任); 卜 and 卜 in the characters 考; 賴 and 賴; 目 and 目。Several characters exhibit extremely unusual forms, e.g. 十 for 十（甲）; 爾 for 爾。However, it is not only upon such conclusive evidence as variations of character structures that we know this inscription to be a fake; the contents are also sufficient to condemn it as a rather poor quality forgery.

Kuo No-jo does not include it in his large catalogue but Yang Shu-ta makes a few remarks concerning it; he observes that
the character 玉 should be regarded as a sentence and that it should read as: 始 易 友 日 ～. Regarding the two characters 貴 he says that they should both be read 裏 because other bronze texts mention the King's being in 篮帘 (several commentators consider that this is equivalent to Feng of the traditional texts). The second 夫 character in the investee's name seems to Yang to be similar to the archaic form of 禘; he simply makes this observation then states: 'the script of the ancient people lacked definite shape in this way', an opinion with which we do not agree.

There is no other inscription that contains so jumbled an assortment of facts, and it is unique in its mention of the King being in so many different temples in the one day. Furthermore, it has confused the functions of seigneur and investee. Ta-Fu-Shih acts as the seigneur (while the King is present!) and rewards a number of people; having done this he extols the King's grace and produces the vessel to commemorate the affair.

In nearly every inscription where the character 易 is used, benefices are enumerated immediately thereafter; in a few cases may be noted the term 多 易 , and also such combinations as 易 休, 易 禪 etc.; these do not affect the general rule, of which this text is the only exception. There are many inscriptions recording an investiture ceremony with which the present one might be compared. So distorted is the
account that no hesitation seems necessary in condemning it as a fake upon the basis of such a comparison alone. 17.

The practice of Chinese scholars of accepting such texts without question as to their authenticity has resulted in many misunderstandings of Chou period culture. When confronted with inscriptions such as the present, they immediately lay down general conclusions based upon observations rather than studies: 'in the Chou period it was thus' and then they quote relevant examples taken at random from the bronze texts and often support these with quotations from the traditional texts which in all probability were used by forgers as a basis in the compilation of the bronze texts themselves. This uncriti-

17. Kuo Mo-je has possibly omitted the inscription in his large survey because of similar doubts. Although it is tempting to suggest here that inscriptions containing confused accounts of the investiture ceremony might, because of this characteristic, be classed as fakes, such texts must be considered very carefully. If it was indeed the custom in Chou times to record the details of the ceremony in inscriptions, we are able to consult a number of long inscriptions (ins. S.100.2, T.149.1, 99.1, etc.) which illustrate the procedure of the ceremony; in short inscriptions abbreviation of detail would be expected and typical examples are also available (ins. 25.1, 28.4, S.31.7, etc.). Here the nature of the abbreviation is exactly what would be expected from a scribe used to composing such documents. There are many other examples, however, (e.g. ins. T.25.17, 27.11, T.30.11, T.35.5, etc.) which offer little sign of intelligent composition; in these cases there is every reason to suggest that, providing the prototypes from which these inscriptions were copied may still exist, the forgeries will be determinable as such in much the same way as illustrated in the case of ins. 71.2 (p.192). Confusion of subject matter seems obviously to be a result of copying phrases and sentences indiscriminately from various inscriptions and other sources; in doing this the forger often leaves his mark where he fails to understand the significance of all that he copies.
cal attitude to dubious material is a most disconcerting one, as the Chinese scholar has the characteristic of writing in a very convincing manner; his writings teem with quotations culled from innumerable sources, and quite often very ingenious ideas are given birth to as a result of his selection of material.

Suspicious features in the three inscriptions are:

(a) muddled context,
(b) necessary characters omitted,
(c) inconstancy of character structures,
(d) text reads from left to right with characters normal,
(e) erratically written characters,
(f) month-quarter term (?),
(g) incorrectly used characters ( shown on line 6, 收 on line 7).

Items (a), (c), (e), (f), and (g) are common to the three inscriptions.

4. ins. S.70.2  The Chou Kuei.

1. In the fourth month, in the first quarter of the month, the King was in the Hsi Ancestral Temple. Tsai-

2. Hsi-Fu assisted on the right. Chou stood.

The King read the decree to Chou and
stated:

3. 'Award you with .... red kneecaps, a black robe, a belt and sash buckle, a banner, metal ornamented reins (?), a dagger-axe, an ornamented lance, red sand. Employ these in sacrificial feasts (to) your ancestors' and deceased father's affairs. Control and administer the Barbarian slaves and Hsiao-She in (?) Lu (?)

6. Chou bowed low his head, responded extolling the King's grace and command. Therefore, made (for)

7. accomplished deceased father (this) precious Kuei-vessel. May grandsons and sons forever preciously employ (it).

Five different inscriptions containing this text are reproduced in the Po ku, Li tai and Hsiao t'ang Catalogues; the reproductions in each catalogue are copied from the same originals - two lid-texts and three vessel-texts. They will be referred to in order of appearance in the three catalogues: Text 1 is a lid-text (Hsiao t'ang, p. 56a); Text 2 a vessel-text (Hsiao t'ang, p. 56b); Text 3 a lid-text (Hsiao t'ang, p. 57a); Text
Fig. 23. Ins. S.70.2, structural variations in the series.
4 a vessel-text (Hsiao t'ang, p. 57b); Text 5 (Hsiao t'ang, p. 58a) is identical with the vessel-text appearing in the K'ao ku Catalogue (3/15b) which does not list the other four inscriptions, nor give any indication that the vessel was part of a set. Texts 1 to 4 are probably forgeries based on the K'ao ku Catalogue vessel (i.e., Text 5); in the latter inscription the 9th character of line 2 is 宓, an error on the part of the compiler, and is maintained in the three later catalogues. This character is the name of the entrant-on-the-right but appears here as the investor! Text 4 seems to be a copy made on the basis of Text 5 (see appended Table); note particularly characters 14, 17, 28, 35, 51, 52, etc. Character 19 is written as 周 instead of the incorrect 宓; characters 29 and 32 written normally in Text 5 are reversed mirror-fashion in Text 4; character 52 reversed mirror-fashion in Text 5 is written normally in Text 4; character shapes and structure are generally improved in the latter inscription. Texts 1, 2 and 3 were probably manufactured by a different forger; note their characters 14, 19 and 52, 17, 24, 28, 35, etc. which are different in certain details to those in Texts 4 and 5. Only Text 1 contains the reversed sun-tzu phrase.

Throughout the five texts slight variations of character structures may be noted, but so confused is the picture that we avoid reference to every variation; the Table of identical
characters, although incomplete, gives sufficient indication of the confused state of the five inscriptions. If they were all genuine, we might at least expect that the manufacturers would have been consistent in details of script as much as they were in details of the decor. In line 2 of the text the record of the investiture ceremony is incorrectly phrased: the investee, Chou, 'stands' - this is an error, the character should be 'enter'. The compiler confused the 即立 and the 入門立中延 sentences. In the investiture ceremony the King does not himself read out the decree to the investee, but orders an official of the Court to do this. The text of the King's command in nearly every case precedes that of the list of benefits. A muddling of details of this nature is obviously due to careless and ignorant copying from a number of available prototypes - the forgers of the five texts did not fully understand, or were not particularly concerned about, the

---

18. The character 立 does, of course, occur in both sentences and may be accepted as a form of abbreviation; the next sentence, however, betrays the fact that the compiler of the text was not aware of the King's function in the investiture ceremony.

19. cf. ins. S.156.1, S.222.1, T.107.1, T.119.1, 102.1, 104.1, etc. S.76.2 and T.65.1 are further exceptions caused by confused compilation as in the present text.

20. cf. ins. S.204.1, S.110.2, T.500.1, T.101.1, 107.1, etc. A few occur without commands stated, e.g. S.100.2, T.101.2, 70.5, 70.3, etc. Ins. S.70.2, T.22.2, 106.1, and a few other rare cases, have the King's command placed after the listing of benefits.
general idea of the investiture ceremony; a more thorough investigation of texts available to the Sung forgers might possibly lead to the discovery of one or more of the inscriptions originally copied.

Features suggesting the five inscriptions to be forgeries are:

(a) muddled context,
(b) necessary characters omitted (deceased father's name),
(c) month-quarter (?),
(d) inconstancy of character structures throughout a series of identical texts,
(e) the first recorded inscription of a series (in which the further inscribed vessels with the same text were presumably 'discovered' later) contains suspicious signs of forgery.

The last point is an illustration of Hsū Chung-shu's first criterion (p. 251) which seems applicable here, but it must be admitted that it is difficult to be certain that the earliest published inscription was the only one known when it was incorporated in the K'ao ku Catalogue. Of the five inscriptions in this series only Text 1 contains the reversed sun-tzu phrase, and both as a later published inscription of the series and as a lid-text, it supports particularly well the value of the reversed phrase as a criterion of forgery. We can imagine the artisan having completed the engraving of the vessel model text
with a certain degree of care, hurries through the engraving
of the lid-text and in the last line erroneously engraves the
character first. He has probably not purposely copied
it from any original but has merely added the 'silk' element
unwittingly; knowing, however, that one or two other inscrip-
tions have the phrase reversed, he does not attempt to correct
it.

5. ins. S.120.1 The Tsin Chiang Ting.

1. In the King's ninth month on the day
   yi-hai, Tsin Chiang said: I have
2. succeeded to my former mistress Tsin-Fang.
   I will not
3. rest in (?) useless repose (but will)
   regulate harmoniously the clear virtue
   (and) extend .... my
4. plans (and) thus assist my lord. (I will)
   diligently extol his shining
5. merit; reverently not bring disaster ....
   .... the Ching armies, bring into order my
6. myriads of people .... .... I award a
   Hu-vessel, small cowries (?) - 1,000 liang.
7. Do not neglect Wen Hou's illustrious com-
   mands. Let X, T'ung and Y.
8. invade Naï, T’ang and Yuan (?). Take
their auspicious metal and employ it
in making
9. (this) valuable and honoured Ting-vessel.
Therefore pacify ..., tranquillize and
cherish those afar and near.
10. The sovereign Ts’in Chiang therefore prays
for ..., ..., a ripe old age;
11. ..., ..., ..., a myriad years without
limit; to be employed in sacrifice,
12. to be employed in virtuous and loyal pro-
tection. May grandsons and sons ..., three ...
longevity ..., ... .

The rendering is a tentative one for numbers of characters
cannot be definitely transcribed; notwithstanding this and
other difficulties, we believe the interpretation is sufficient
to allow discussion on certain points in the text. The inscrip-
tion first appeared in Cu-yang Hsiu’s Chi-ku lu pa wei (1/3a-b)
and is reproduced in the K’ao ku Catalogue which presents two
rubbings - that in Cu-yang’s compilation together with Liu Yuan-
fu’s transcription and Yang Nan-chung’s commentary, and a second
rubbing which seems obviously to have been taken from a differ-
ent original. Cu-yang Hsiu’s rubbing is reproduced (with
occasional slight variations) in the Po ku Catalogus (2/7b),
the Li tai Catalogue (p. 96b-97a), and the Hsiao t'ang Cata-
logue (p. 8a). A rubbing taken from another vessel is to be
found in the Hsi ch'ing Catalogue (2/13b-14a); this inscription
is written with only 5 characters per line, about 30 characters
are left undrawn. With the exception of this last inscription
the reproductions in the three previous catalogues are all based
on that of Ou-yang Hsio. Our comments follow the Ch'iku lu na
wei rubbing as reproduced in the H'ao ku Catalogue (1/7a); in
most respects they are applicable to the second rubbing (1/6b)
but we omit reference to the Hsi ch'ing Catalogue text.

Inconstancy of character structures is to be noted in a
few cases: 我 is written as 甲, 乙, and 丙; 王

21. Reproductions of identical texts in the Sung Catalogues
taken from the same original inscriptions are usually clearly
determinable as such. Some variations of minor details of the
characters may be observed throughout the various catalogues
and sometimes throughout different editions of the same cata-
logue; such variations tend to be insignificant. It is fully
obvious to the painstaking observer that the reproductions were
particularly careful copies of the inscription text: where the
structures of duplicated characters in the same text or in a
series of identical texts were inconstant, the feature is faith-
fully preserved. The position and placement of individual
characters is clearly in accordance with that of the original.
The sizes of inscription areas vary; individual characters, too,
are drawn in different sizes. Characteristics such as these,
if considered in relation to hand-copies published since Ch'ing
times which may in turn be compared with the original inscrip-
tions, illustrate quite well the general reliability of the
Sung Catalogue reproductions. If inconstancy is present in a
hand-copy in these catalogues, it appears as a purposeful ren-
dering by the copyist; other features are equally reliable.
These remarks are especially applicable to the Hsiao t'ang Cata-
logue reproductions; those of the other catalogues are somewhat
roughly drawn but nevertheless preserve general characteristics
of the script with reasonable accuracy.

22. Jung Keng has proclaimed this inscription to be a fake,
as 美 and as 美; the 貝 element appears with either one centre stroke or two centre strokes in several characters.

The character 貝 is written normally in line 8 and reversed mirror-fashion in line 11. As regards the context it is difficult to know exactly what this record is about - the whole text is constructed as a statement by Tsin Chiang who speaks of her lord, Wen Hou (?), (presumably deceased), then of her part (?) in the government of the State. After stating various platitudes in relation to this, somebody awards benefices to somebody (我 may also be the object of the previous sentence). Possibly Tsin Chiang is awarding the benefices to a person not recorded in the text for she continues her speech with a series of commands. Following these, however, she speaks as though she herself were the investee. Although the inscription requires further thought in regard to this confusion we doubt that any acceptable interpretation can be made if based strictly on the text.


23. The inscription is composed of 'stock phrases' found in numerous bronze texts; there seems to be a rather questionable arrangement made by selecting a little haphazardly, established phraseology from pre-existing sources. This is the impression we have gained upon close examination of the contents; an inscription of this type could conceivably have been produced by a Sung period forger working along the same lines as the manufacturer of the Chia Yi text (ins. 71.2). If our opinion is correct here, the difficulties in arriving at an interpretation will be easily explained.
Kuo Mo-jo notes a rhyme pattern in the last few lines and suggests the characters to be part of it. If he is correct, the reversed sun-tzu phrase will be adequately accounted for; it is, however, not necessarily proof of the authenticity of the inscription. It is interesting to note in the commentary given in the Ming Ch'ung Chen edition of the Li tai Catalogue that the sun-tzu phrase is written twice (referring to the reversed form above) in its natural order, while in the Wan Li edition these are written in the reversed order. A trivial observation, but certainly one showing the propensity of Chinese to think in the natural order of tzu-sun rather than in the reversed form.

Notwithstanding the possibility that the sun-tzu phrase is reversed for purposes of rhyme, it seems that the two Tsin Chiang Ting inscriptions are classifiable as forgeries at least on the basis of the first of the following characteristics:

(a) inconstancy of character structures,
(b) normal and mirror-reversed characters,
(c) muddled context (?),
(d) identical characters inconstant in structure in the two inscriptions.

The Reversed Sun-Tsu Phrase in Early Ch'ing Catalogue Inscriptions.

1. ins. T.8.2

The X Yi.
1. Made this honoured Yi-vessel. Grandsons
2. and sons may they forever value (it).

The inscription (Hsi ch'ing Catalogue, 14/18b) is not entirely clear; the character 阖 has only a small portion of the right-hand element drawn, three other characters are also incompletely drawn. Jung Keng's sixth criterion (p.45) this incompletely inscribed vessel, - there is obviously no point in casting a vessel with a text of this sort. If the forger had placed a name or a name-title combination before the character 'made', the inscription might not have appeared so clearly spurious. The characters 阔 are written with 'upturned palms' on the 'arm' strokes - this is rarely found amongst the inscriptions. The tzu character is almost invariably drawn as 阕. The character 丙 is written on the same principle as the modern form, i.e. 丙, the two upper elements seldom are placed thus above the 'cowrie' element in archaic script. The vessel containing this inscription is of unusual design but apparently is a fine piece of workmanship, and illustrates the skill of the forger in this respect. Features of forgery may be enumerated as:

(a) incomplete text,

(b) erratically written characters (?).

24. See also his article (op. cit. p.342) where the present inscription is classified as a fake.
2. ins. T.10.6  The Yang Ting.

1. Yang made (this) precious
2. Ting-vessel. Grandsons and sons value (it).
3. May they for a myriad years.

Chi ku Catalogue, 4/7b; the characters sun-tzu appear reversed mirror-fashion while the remainder are normal; 上, 春, and 風 are written erratically; the enclosed elements in the two characters 畳 are reversed in position. This last observation is of doubtful value as there are numbers of similar cases; they do, however, form a minority. The second character 畳 which is placed erroneously at the end of line 2 instead of line 3 is incompletely drawn; so, too, is the character 万. It cannot, unfortunately, be determined whether the original inscription was incompletely engraved, but the lack of three lower strokes in the 'silk' element of 頃 and the two short strokes omitted in the lower right-hand element of 了 suggest strongly that Juan Yuan has recorded every detail of a patina-free text surface.

The items to be enumerated are:
(a) mirror-reversed and normal characters,
(b) erratically written characters,
(c) position of character elements reversed (?),
(d) incompletely written characters,
(e) muddled context.

3. ins. T.12.15     The X.Yi.

1. (I), X, have made this precious and
   honoured
2. Yi-vessel; may for a myriad years
3. grandsons and sons forever value (it).

Two inscriptions are reproduced in the Hsi Ch'ing Catalogue
(9/7b) - a vessel-text in two lines and a lid-text in three
lines; the contents are identical. Character structures, how-
ever, vary considerably from one text to the other: the proper
name 'X' is written 떔 in the lid-text and 𦭁 in the vessel-
text; 𦭁 is written as 𦭅 and as 𦭀. Several charac-
ters are normal, several are reversed mirror-fashion. The
vessel and lid are richly decorated, and as far as it can be
judged the workmanship is of a high order.

In numbers of lid-texts it may be observed that the in-
scription is a direct copy of the contents of the vessel-text;
the lid, however, is actually a separate object, and it would
seem correct to refer to it as a 'lid' in the appropriate
section of the inscription. One fully attested lid inscription
which is identical to the vessel-text describes itself as a
'lid' of the vessel (ins. 33.8). Amongst the unattested inscrip-
tions there is not a single example of this; the point may not
be significant, however, we merely record the observation for
future consideration. The variation of numbers of characters
per line and numbers of lines per text in cases such as the
present is a further feature that may later be found of some
importance; the items that cause us to suspect this inscription
are:

(a) mirror-reversed and normal characters,
(b) erratically written characters,
(c) inconstancy of character structures
throughout lid and vessel texts.

4. ins. T.12.16  The Wang Po Fu X Yi.

1. Wang-Po-Fu-X
2. made (this) honoured Yi-vessel.
   Grandsons
3. and sons may they forever value (it).

In the commentary accompanying this inscription in the Hsü
chien (A) Catalogue (14/34b) a remark is made about the reversed
sun-tzu phrase after quoting a line containing it in the
Shih ching; the commentator suggests that the word order is
confused in order to illustrate more effectively the sense of
abundance (of descendants). He does not observe the unusual
occurrence of a typical technique of rhyme in a prose text.

The inscription presents no indication of forgery other
than the reversed sun-tzu phrase.

5. ins. T.13.4 The Kuo X X Ch'i.

1. Kuo .... .... ....

2. the King. Therefore made (for) Liang-Shu

3. (this) precious. Grandsons and sons value (it).

Hsi ch'ing Catalogue, 13/27b: the omission of the vessel-name in line 3 is possibly conclusive proof of forgery. There are very few examples of such carelessness. The proper name 'Kuo' and the two characters 'precious' are erratically written. Other than the reversed sun-tzu phrase there are only these two items to be noted:

(a) omission of necessary character,
(b) erratically written characters.


1. Po made this precious and honoured Yu-vessel. May for a myriad

2. years grandsons and sons forever preciously employ (it in) sacrifice.

Ch'en Meng-chia, in the second of his series of the 'Chronology of Western Chou Bronzes' (K'ao ku hsieh pao, vol. 10, p. 100) has published a rubbing of the original inscription with which
the Hsü chien (A) Catalogue reproduction (16/1b) compares favourably. The inscription exhibits no features causing us to suspect its authenticity other than the reversed sun-tzu phrase. In short inscriptions there is little opportunity to discover signs of forgery. Possibly this is in a large measure due to the prevalence of a relatively large number of authentic but unattested inscriptions of similar style and length (e.g. those similar to attested examples such as ins. 2.19, 3.2, 3.7 and 6.2) which have influenced forgers ever since the faking of inscribed vessels commenced. Brevity of text tends to preclude errors in character structures and confusion of phraseology; duplication of characters is comparatively rare and those required in the compilation are, with the exception of personal names, both simple to draw and extremely well known by most educated Chinese. Inconstancy of character structures is rarely seen in short inscriptions.

7. ins. T.14.1 The Ch'u Kung Chia

1. Ch'u Kung, Chia(?), himself made (this)
   precious, great

2. Lin(?)-Chung-vessel. Grandsons and sons

25. It is too early yet to assess the extent that genuine inscriptions have influenced forged compilations; until more examples of the text types actually compiled in Chou times are discovered by scientific excavation this urgent problem cannot be solved. Further remarks concerning the matter appear in the concluding section.
Fig. 24. Hand-copies of ins. T.14.1.
may they forever value (it).

Juan Yüan first published this inscription (Chi ku Catalogue, 3/2); Kuo Mo-jo has reproduced four others, his fourth rubbing is possibly the original from which Juan Yüan drew his copy which he states was taken from an old rubbing. Exceptionally fine rubbings are reproduced in Lo Chen-yü's San tai Catalogue but we shall refer to those in the T'u lu Catalogue in the order they are placed there; the first of these exhibits a particularly careless form of misjudgement on the part of the bronze artisan who omitted to engrave the character 'Ch'ü' and later had to insert it above the inscription area – he would hardly have placed it in this position when commencing the engraving. The character 'Chung' is written with its two elements interchanged, but not reversed mirror-fashion; the 'metal' radical should appear on the left-hand side, otherwise the characters are normal.

The second inscription has the third character written with the 'claw' radical on the left-hand side; the 'cowrie' elements in the two characters 寶 are constructed on different principles to those in the first; the 八 element is incorrectly written and reversed mirror-fashion in the eighth character; and the character 'Chung' appears with the elements in their usual location.

The third inscription contains four cases of mirror-revers-
ed characters and elements while the remaining characters (actually only 佳 and 金 are determinable) are normal. The fourth inscription is similar.

The fifth inscription exhibits a certain originality in employing the archaic form of 金 instead of 佳, and has even attempted to create a character that more readily appears to be 金 (a particular style of bell). Instead of 大 the artisan engraved 木; he omitted to place the element 金 in an appropriate part of 金 and later placed it in the lower left-hand section of the character. Some characters and elements appear normal while others are reversed mirror-fashion.

To these observations we may add several general ones. In all cases the character 金 is written in a form similar to the modern character, but in only two cases is there constancy of structures (Texts 1 and 3) - there are four quite unrelated ways of writing the character amongst these inscriptions; the character 金 has been badly misunderstood, the centre element should be written 但 but in the earliest of the inscriptions (Kuo's No. 4) it has been shaped as 父 with the result that an incorrect rendering 父 appears; the reversed sun-tzu phrase occurs in each inscription.

26. Several commentators interpret the unusual character preceding 'Chung' in this series as 金 or as 林; see Yang Shu-ta's long discussion, Chi wei chiu ch'in wen shue, pp. 98-99.
Doubtful features of the four inscriptions may be listed as:

(a) badly executed characters,

(b) inconstancy of character structures throughout a series of identical texts,

(c) erratically constructed characters,

(d) normal and mirror-reversed characters,

(e) the first recorded inscription of a series (in which the further inscribed vessels were presumably 'discovered' later) contains suspicious signs of forgery,

(f) incorrect use of character (i.e., 木 in Text 4),

(g) general appearance of inscription.

8. ins. T.16.8  The X Kuei.

1. .... Yi-vessel (?). Tsu-Hsin's precious
2. Kuei-vessel. A myriad years grandsons
3. and sons forever preciously employ
   (it),  Clansign (?)

The Chi ku Catalogue text (6/27b) may be compared with a rubbing from the original inscription in the San tai Catalogue (7/40b); the second character is obscure because of patination.

27. In the Table at the conclusion of this Section each individual inscription in a series such as the present is listed with the relevant characteristics, enumerated. The items noted here are not common to each of the inscriptions, and to avoid complicated explanations it is more convenient to attend to such details in the Table. Since the writing of this Section, 3 further faked copies have been discovered and are incorporated in the Table.
but it appears to be the character 亙 . According to the context it would be expected that the first character should be a personal name, while the second should definitely be the character 亙 'made'. It certainly is not this, nor is it possibly the character 亙. The text is obviously corrupt here although the two characters concerned are only partly clear. The ductus of the script, particularly that of the character 年 is very close, indeed, to that of ins. T.14.2 examined above (cf. Ch'en Häng-chia's rubbing). We may have here two inscriptions produced by the same forger. The script is particularly well executed and illustrates the degree of skill that may be achieved by forgers. The inscription may be labelled a forgery because of the corrupt text; Tsu-Hsin must be regarded as part of the vessel-maker's name; this is a definite error for the two characters can only be interpreted as the name of a deceased person. Other features are:

(a) muddled context,
(b) incorrectly used characters.

9. ins. T.35.2  The Cheng Shih Yi.

1. In the eighth month on the day yi-hai, the lord, Ching-

2. Hou (the Marquis of Ching) glorified his Cheng-Shih official, (Mai), and held a feast (in his honour) (?) in
Fig. 25. Identical characters in the Mai inscriptions. Marked cases of inconstancy throughout the group may be noted; the most disconcerting example is that of the lack of standardisation in the writing of the investee's name.
3. The Mai Hall (?). Awarded metal. Therefore made this honoured Yi-vessel to be employed in feasts (in honour of) Ching-Hou's affairs at home and abroad ....

5. decrees. Grandsons and sons may they forever value (it).

Two inscriptions contain this text - a lid and a vessel (Hsi ch'ing Catalogue, 13/10b); personal names and phraseology appearing in the text are to be found in ins. T.30.5 and 28.1 which are close in style and content. Ins. T.162.1 which is studied later in this section also has a Ching Hou, a person Mai, and the character 醎. All four inscriptions are records concerning the person Mai whose name is written differently in each text! The table of identical characters opposite illustrates further the lack of constancy throughout the four inscriptions; other characters, however, are identical in nearly every respect.

Ins. T.35.2 and 28.1 record different dates on which the investiture was made - the same event is recorded in T.30.5 without a date. It may be a case of different investiture ceremonies, and if so, this is the only example of a number of different records referring to the same investee who receives (also in ins. T.162.1) the same benefice on each occasion and without any service on his part being recorded!
Such features cause us to suspect the group as a whole but ins. T.35.2 with which we are immediately concerned, manifests two features only which seem to suggest that the text is spurious (other than the general points above and the occurrence of the reversed sun-tzu phrase). The character 臈 which Kuo Ho-jo interprets as 稀 'to pour out and serve guests', 'to pour out a libation in sacrifice' is employed in two contexts, in one of which it appears quite unsuitable. In the translation the English rendering of 'hold a feast in honour of' does not illustrate well the discrepancy; it is necessary to compare the present text with ins. T.30.5 and 28.1 where the same ideas are expressed: the character 臍 is used early in both texts in almost exactly the same context as in its first occurrence in T.35.2. The reference towards the end of each inscription to the affairs of Ching Hou is, however, expressed by the verb 從; the second occurrence in the present inscription in a practically identical context would suggest that 臉 is equivalent in meaning to 從. In fact, on the basis of such a comparative study, we would be justified in interpreting this strange character as 'follow', 'obey', etc. Such an interpretation will not, however, suit the first occurrence. The text cannot be stated definitely to be corrupt in one or other of the two sentences; we merely remark upon the confused nature of its meaning and usage in the present inscription.
The character 之 (zhī) is employed in place of 住 (zhù) in date formulations in several long Shang-style texts, but is found very rarely in Western Chou or Eastern Chou texts. Early commentators (cf. Hsi ch'ing Catalogue commentary) used ingenious arguments to support their rendering of this character as + 'ten', reading the date as the 18th month! The significance of so few examples of 之 in date formulation, however, cannot be determined until more attested inscriptions are available. We will record only the following three suspicious features:

(a) incorrectly used characters (?),
(b) erratically written character, ( 肋 ),
(c) identical characters in a series made by the same person inconstant in structure.

10. ins. T.55.2 The Tuan Kuei.

1. In the King's fourteenth year, in the eleventh month, on the day,

2. ting-mao, the King's ritual vessel (?). Pi (name), X-sacrifice. On the day, wu-shen, (increased?) the ceremony was repeated (?).

3. The King reviewed Tuan's merits. In consideration of Pi-Chung's grandsons and sons
ordered Kung-Hua to give (?) a large area
of undeveloped land (?) to Tuan. Dared to
respond and extol the King's grace.
Therefore made (this) Kuei-vessel.

grandsons and sons

for a myriad years employ (it) in sacrifice.
Prayers. grandsons and sons.

clansign (?)

The inscription was first published in the Yen ching Catalogue
(5/23), a rubbing is reproduced in the San tai Catalogue
(5/54a). The character 鼎 is an incorrectly written form
of 鼎 in which the upper element is always written as 顷
or 丷 (authorities disagree as to which modern form it
should be transcribed); here it is a reversed 'man' element
(cf. the character 休, line 5). Kuo interprets it as a
complex form of 顷 'in' which rendering would assist the
sense somewhat. However, as there is definitely no grounds
for this interpretation the character must be regarded as an
incorrect drawing of 鼎, which, in any case, would hardly
be employed for the simple form of 顷. Our translation of
line 4 follows Kuo's rendering. The last line of the text
seems to be rather confused; it may be noted, too, that the
investee omitted to qualify the Kuei-vessel with the usual
'precious and honoured' phrase. Such omission is extremely rare. Characters are, on the whole, quite well executed and there appears nothing untoward in the script. The 'review merits' phrase will be noted as a possible feature of forgery:

(a) meaningless groups of characters,
(b) incorrectly used characters,
(c) omission of necessary characters,
(d) 'review merits' phrase (?),
(e) erratically written character.

11. ins. T.56.1  The Shih Chü Kuei.

1. In the King's third year, the fourth month, the second quarter of the month, on the day, shin-yu,
   the King was in Chou and arrived (at)
   the New Temple.

2. The King, approached (?) the Cheng-Shih,
   official Shih. The King called forth

Shih-

28. The rendering of 'review merits' has been suggested by Karlgren (Yin and Chou, p. 36) and is followed here. It is found in several inscriptions exhibiting inconstancy and various suspect features. It is, however, a phrase employed in the recently excavated ins. 54.1, and thus is definitely of Chou origin. The possibility that it may indicate forgery because of misuse is discussed in the commentary following ins. 54.1 in Section Six.

5. and bowed low his head and dared to respond extolling the Son of Heaven's great and illustrious (?) grace. Therefore made (for) accomplished deceased father X-Shih, this

7. honoured Kuai-vessel. Generations of grandsons and sons forever value (it).

The inscription first appears in the Chi ku Catalogue (6/15a-b) and is reproduced in several later publications. There is some disagreement as to the interpretation of the second character in line 3 (茲) while in line 4 the pronoun 良 is now generally accepted as a proper name. Line 3 (first five characters) is very difficult to understand and is left unexplained by the commentators; it seems to be an unfortunate selection of characters rather than a purposeful composition. Inconstancy of a minor nature is to be observed in the characters Chü and also in 見 and the 'cowrie' element in 錀. Although the archaic characters generally appear well executed the careful observer will note a certain lack of understanding: 見 is written as 鏡 - a form that occurs nowhere else; 木 is as 多.

29. A rubbing in the San tai Catalogue (6/53b) is particularly clear and illustrates the variation well; it is obviously the work of one unused to the archaic script.

30. It is, of course, a corruption of the form 木 wherein the
with only two detached strokes; the right-hand element of 'kuei-vessel' is written \( \text{⿷} \) instead of \( \text{⿵} \); the character \( \text{⿵} \) is incompletely drawn.

Shih-Chü produced another inscribed vessel and lid which differs, however, in content from the earlier 'discovered' vessel above. Identical characters vary considerably in structure throughout the three inscriptions. The later 'discovered' inscriptions also contain the reversed sun-tzu phrase and are discussed in the next group (p. 301).

(a) character structures inconstant,
(b) meaningless groups of characters (?),
(c) erratically written characters,
(d) identical characters in a series of inscriptions made by the same person are inconstant,
(e) incompletely written characters,
(f) month-quarter (?)

12. ins. T. Ch. 1 The Hsien Kai Yi.

1. In the twelfth month, in the third quarter of the month, the day being jen-wu, Po-Shin-

2. Fu (bestowed) grace on Hsien-Kai and said: Tsa! your assistance (?) Hsien-Po

30. 'curled tail' has mistakenly been drawn as \( \text{⿷} \).
3. Hall. Award you with a wife (?) a Tsüeh-vessel (?), .... .... use. King.

4. yellow. .... Hsien-Kai hastened to extol Po-Shin-Fu's grace and said:

5. Gracious Po .... .... .... Hsien Po Hall. award. lord. I.

6. (particle) award. longevity. I am unable not to, with Hsien-Po

7. a myriad years, protect .... dare to record in (this) vessel, saying:

8. May from this day grandsons and sons do not dare to forget Po's grace.

This inscription appears in several catalogues and was first reproduced by Juan Yüan (5/36); his copy is more accurate than that published in the Hsü chien (A) Catalogue (6/26) which contains several slight errors. In later catalogues there are reproductions of a rubbing taken from a vessel with this text (cf. T'u lu Catalogue, p. 38); it appears to be the original from which Juan Yüan made his copy. In the Naito Collection of rubbings is a further inscription—a copy made of the present one, with numerous errors, but interestingly it corrects the reversed sun-tzu phrase and has this written as it should be.

---

31. One of the largest collections in Japan; at present lodged in the Jimbunka Kenkyūjo, Kyōto University.
This same inscription appears in the first volume (pages are not numbered) of the Meng p' o Catalogue; in the Liang lei Catalogue (6/20a-b) is reproduced a lid and a vessel-text which differs in many respects to the preceding two inscriptions but maintains the reversed sun-tzu phrase. Kuo No-jo classes the lid-vessel texts as faked copies of Juan Yüan's original; he apparently did not know of the Meng p' o Catalogue inscription. The correction of the reversed sun-tzu phrase in this forgery together with the painstaking copying of the original phrase in the Liang lei Catalogue inscriptions are features of some importance. No one will doubt that both texts are later fakes; as such they strongly support our argument that the reversed phrase used in prose texts is a type of error that can be dated no earlier than Sung times. Its origin must have started in a Sung forger's workshop in the same way as it did in the case of the Chi ku Catalogue text now to be examined.

32. The Meng p' o Catalogue inscription is in a lid; that in the Naito Collection is exactly the same inscription. A vessel with the inscription was presumably manufactured but we have not discovered any rubbing of it.

33. The problem is, of course, how did the reversal first commence? Ins. S.120,1 was possibly the earliest 'discovered' (and was certainly the first published) inscription with the reversed phrase, the character 'tzu' being intended to rhyme with the last character 乞 as it was transcribed then (see Liu Yüan-fu's transcription in the Chi ku lu na wei, 1/4a). It must be allowed, too, that in the 11th century or earlier, genuine inscriptions with a rhymed reversed sun-tzu phrase may have formed the basis of forged compilations. In Ch'ing and later times the pattern was already established and forgers had merely to consult the Sung Catalogues and current collections (unpublished) for required details of this kind.
Yüan's inscription is also obviously a forgery and exhibits several features which instantly prove this assertion to be correct.

Inconstancy of character structures is to be observed: 敢 is written as 敢 and as 敢; 女 as 女 and as 女; 不 as 不 and as 不. Incorrectly written characters such as 壺, 七, 無, 也, 等, etc. appear. Characters are used incorrectly, e.g. 女 in line 2 which is given the sense of 女; also the characters 用 王 黄 among the benefices (lines 3-4). Lines 5-7 exhibit a hopeless confusion with occasional flashes of sense. The student need not be surprised when he discovers that Yang Shu-ta, who often makes interesting suggestions regarding obscure characters and passages, simply presents a short study of the character 皇 and confirms earlier scholars' interpretation of it as a sort of expletive.

The remainder of the long text with its numerous difficulties has been wisely left alone (Chi wei chü, p. 13); Kuo Ho-jo (Kao shih pp. 67-8), however, has offered several interesting suggestions, but it must be admitted that most of them are open to question, particularly from the point of view of the whole text which still does not read properly.

(a) inconstancy of character structures,
(b) erratically written characters,
(c) incorrectly used characters,
(d) meaningless groups of characters,
(e) month-quarter (?).

13. ins. T.87.2 The T'ung Kuei.

1. In the twelfth month, in the first quarter, on the day, ting-ch'ou, the King
2. was in Tsung-Chou and arrived in the Grand Temple. Yi-Po assisted on the right;
3. T'ung stood in the middle of the courtyard facing the north. The King ordered T'ung to assist
4. Wu-Ta-Fu in superintending the territories and forests and the Wu shepherds; from
5. Fu-Tung to Ho, and northwards (?) to Yuan-
6. Shui. Generations of grandsons and sons assist Wu-Ta-Fu. Do not
7. you again be relaxed. Responded extolling the Son of Heaven, his grace;
8. therefore made (for) my accomplished deceased father Hui-Chung, (this) honoured and precious Kuei-vessel.
9. May for a myriad years descendants forever value and employ (it).

There are two inscriptions containing this text; the earliest published one appears in the Hsü chien (A) Catalogue (6/29b);
accurate hand-copies appear in the Cheng sung Catalogue (6/7-8) of two vessels one of which is presumably the original published in the Imperial Catalogue; rubbings may be consulted in the T'ui Lu Catalogue (pp. 73-74). Characters generally are quite well drawn; there is only one case of inconstancy in each inscription, 亜 and 亜; inconstancy of identical characters occurs in the two inscriptions: 亜 and 亜; observe also 亜 and 亜. The characters 亜, 式, 蘭 (note unique 'cowrie' element), and 亜 are drawn incorrectly. The character 亜 lacks the upper portion and appears as 亜 only.

In the context several suspicious features may be noted. The record commences as a normal investiture ceremony type and continues thus until line 3, then the King himself orders T'ung to carry out certain duties and concludes his speech with an admonitory sentence. Upon this, T'ung extols his beneficence and dedicates the vessel in the usual manner. Contrary to the majority of inscription types of this kind, no award is made and thus the extol phraseology seems redundant. The wording of line 6 'Generations of grandsons and sons assist Wu-Ta-Fu' is obviously a case of careless selection from a pre-existing inscription; such a command could hardly have been made seriously. In this same line the character 母 precedes 女 unlike all other examples; in line 7 the pronoun 卒 exhibits a most unusual function which is paralleled in only one other inscrip-
tion (ins. S.204.1).

(a) inconstancy of character structure,
(b) inconstancy of character structures throughout two identical texts,
(c) erratically written characters,
(d) incompletely written characters,
(e) confused context,
(f) characters used incorrectly,
(g) month-quarter (?).

14. ins. T.115.1  The Shih Yüan Kuei.

1. The King spoke to this effect: 'Shih-Yüan ....

The Huai-Yi-barbarians used to be my

2. tribute paying subjects. Now (they) dare to (ample=) increase (?) their numbers and wickedly (?) rebel (against)

3. their overseers (and) do not .... my Eastern States. Now I diligently

4. command you to lead Chi'-Tsa, Chi-Fan, Jen-Kua to assist

5. the Hu Shen knights to rectify the Huai-Yi-barbarians and immediately destroy their States and Chiefs called: P'eng, called X,

6. called Ling, called Ta.' Shih-Yüan reverently did not cause ruin and from morning to night ...
7. their .... affairs. Rested and having again (achieved) merit. Cut off ears and heard cases.


9. I do not .... .... I therefore made (for) my deceased father (?) Nan-Shu,

10. (this) honoured Kui-vessel. May for a myriad years descendants forever preciously employ (it in) sacrifice.

The inscription was first published in the Yün ch'ing Catalogue (3/35); hand-copies appear in the Chün ku Catalogue (3.2/52-54) of the vessel-text and of the lid-text which will be referred to respectively as texts A and B. Kuo Mo-jo presents four rubbings of two sets of vessel-lid texts; nos. 1 and 2 (T'iu lu Catalogue, pp. 135b and 136a) are identical - they are two photographs of the same rubbing taken from the same original and have been labelled 'vessel' and 'lid'! The original of both is text B in Wu Shih-fen's catalogue; Kuo's third rubbing (p. 136b) is called a lid-text', but is actually the vessel-text A in the Chün ku Catalogue. His fourth text (which he describes as a 'vessel-text') is an entirely new one and is
probably a later copy of texts A and B. Kuo may have correctly recorded it as a vessel-text, but he has certainly confused the two other rubbings. Lo Chen-yü's first rubbing (San tai Catalogue, 9/28a) is identical with Kuo's first two and is labelled 'lid'; his second one (9/28b) is the same as Kuo's third rubbing and is labelled 'vessel' - these are the originals copied by Wu Shih-fen; Lo's third rubbing is identical with Kuo's fourth but he does not state whether it is a lid or a vessel text (we shall refer to it as text C).

We record the above observations so that there will be no confusion in the mind of the reader who may only refer to the T'u lu Catalogue. Text B, which is the lid of A, contains the reversed sun-tzu phrase. The other two inscriptions employ the normal phrase. Text A contains 115 characters, Text B has 111 characters, while text C has 116 characters; with text A as a basis the following variations will be noted:

texts B and C lack 卜 before 工 (lines 2, 3); text B has omitted 我 before 卍 (line 3); text C has two extra characters between 卍 and 卍 (lines 3-4), the second of these is 卍 which should have appeared before 工, the first character of the preceding line; text B lacks 齊 before 不 (line 3), and 折 before 首 (line 7).

As text B is the lid of A and was made together with the vessel, the omission of four important characters (three of which
omissions completely confuse the required sense) is obviously due to ignorant forgery of the lid-text; as both the lid and the vessel were made together, both are forgeries. This is quite evident in the script wherein inconstancy of the characters 些, 我, 既, and 事 is immediately to be observed; and erratically written characters such as 骨, 骨, 亦, 骨, etc. occur. Inconstancy is to be noted in identical characters throughout the three texts. In line 6 the sense is somewhat confused by the insertion of the 'not ruin' phrase in the 'reverently from morning to night' phrase; both are commonly found in the inscriptions. Text 35 betrays its

34. This is based on an assumption on our part; a vessel and its lid would normally be manufactured together and the decor and inscription on both would be executed by the same artisan or group of artisans. We assume that vessel-lid sets which have been examined by Chinese scholars and collectors exhibit identical characteristics proclaiming their common manufacture - if decor, metal colour, patina, etc. illustrate marked differences, the fact would have been noted and the possibility that one was faked would have been suggested long ago. The assumption that such sets exhibit identical physical characteristics and were originally produced as a set is in these circumstances justifiable; thus if one inscription of the set is proved to be spurious, then both items of the set are faked. In the present case the lid contains the reversed sun-tzu phrase and four characters are omitted; it is obviously spurious, and if we can depend upon the fact that no one has questioned the set as such, then the set must also be classified as a fake.

35. Both phrases occur together, but widely separated, in ins. T.260.1, 167.1, 72.1, 58.1, etc.; the 'reverently from morning to night' phrase is found in many inscriptions and is usually associated with another stereotyped phrase, 'do not disregard my commands', e.g., ins. T.263.1, 260.1, S.156.1, S.115.1, 119.2, 121.2, 123.1, 27.1, etc. In these and other examples it is quite evident that the two phrases cannot be joined as in the above inscription.
fraudulence by the obvious misplacement of the pronoun 午 - the forger noting its omission aimed to engrave it above I but somehow ended in engraving it before 令 in the next line; the redundant character at the end of line 3 is not clear. The first three items noted hereafter particularly refer to text A; the two other texts are obvious fakes:

(a) inconstancy of character structures,
(b) erratically written characters,
(c) muddled context,
(d) inconstancy of characters throughout three identical texts,
(e) omission and misplacement of characters.

15. ins. T.162.1  The Tso Ch'e Hua Yi.

1. The King commanded the lord, Cheng-Hou, to send (drive out?) Fu-Hou to (?) from (?) Cheng. In the second month, the Marquis appeared in Tsung-Chou; all was well. Together with the King (he)

2. arrived at Feng-Ching and sacrificed with spirits. On the next day, in the Pi-Yung park (?), the King ascended on to the boat and conducted the Ta-Feng sacrifice. The King shot a

3. large Kung-Ch'in (swan). The Marquis
ascended on to the red banner boat. followed death completed. This day
the King and the Marquis entered into
the living apartments of the palace. The
Marquis was awarded a black ornamented
dagger-axe by the King in Kan. It was al-
ready evening. The Marquis awarded ....
serfs - two hundred families ...., employ.
King mounting carriage horse, (?)
metal armour, lined

5. garment, kneecaps and slippers. On return-
ing (he) extolled (?) the Son of Heaven's
grace and proclaimed that all was well.
Therefore .... .... .... the Marquis
paid his respects to deceased father (?)
in Cheng.

6. The Marquis's scribe, Mai, was awarded metal
by the lord Marquis. Mai extolled and
therefore made (this) precious and honoured
Yi-vessel to be employed in feasts honour-
ing the Marquis's affairs abroad and

7. at home, and to praise (?) the bright decree.

In the year that the Son of Heaven (bestowed)
grace upon Mai (and) the lord Marquis . . . .

and sons may they

forever without end, end, employ . . . . virtue

and kindness (to their) many associates, associates. Sacrifice diligently (to) the
decree.

This long inscription appears in the Hsi ch'ing Catalogue (6/32b); the text is obviously corrupt and the above translation merely indicates the nature of the context. The particle 于 appears in three forms: 鬼, 手, and 于; the complicated 鬼 occurs three times in the first 4 lines; 手 is found five times in the first 3 lines; while the simple form of 手 is limited to the last 3 lines of the inscription. Not only is the first of the three forms found only in the present inscription, but it is the only inscription using three different forms of this particle - they are in no way related to particular usages; we can only assume that the compiler gradually grew tired of engraving the complex forms towards the end of the text.

Several meaningless groups of characters may be noted, particularly 從 死 咸 in line 3 and 用王乘車馬

36. In lines 1 and 2 鬼 is used with date formulations but in line 4 it is employed as a normal 手. The two other forms are indiscriminately used in identical sentence types.
in line 4. The latter is intended as a benefice but it cannot possibly form sense. In the very first sentence we are told the nature of the King's command to the Marquis of Cheng without any of the usual preliminaries of a record of date or even of his audience with the King to receive the command. The command in question has no connection with the context of the remainder of the inscription; the Marquis joined the King in various ceremonies and received various awards, then he appears in his State of Cheng and bestows a gift on his scribe, Mai. As in the other inscriptions made by this person, no mention is made of services rendered. Mai extols (the Marquis's beneficence?) and has the vessel cast recording the grace of the King towards both himself and the Marquis! The whole compilation is thus very confused.

The characters present evidence of forgery: 需 (lines 1, 2, and 4), 遂 (line 5), 贽 and 征 (line 8), have their elements written as separate characters; the characters 日, 才, and 采 are written as one; there are other cases of characters squashed unnecessarily close together. Some are written incorrectly, e.g. 易 with only two side-strokes, 休 as 体; while inconstancy prevails in the characters 辟 (lines 1, 6, and 7); 若 (lines 1 and 2); 龔 (lines 3 and 5); 唯 (lines 5 and 7). Variations of
identical characters amongst the present and three other related texts were noted earlier (p. 272).

(a) inconstancy of character structures,
(b) erratically written characters,
(c) elements of characters written as separate characters,
(d) inconstancy of characters throughout a series of inscriptions made by the same person,
(e) variant forms of one character used indiscriminately in the one document,
(f) meaningless groups of characters,
(g) unnecessary use of repetition mark (e.g. \( \times \) line 3),
(h) confused context.

The Reversed Sun-Tzu Phrase in Late Ch'ing Catalogues.

The six inscriptions examined in this group were first published in catalogues compiled or printed between 1850 and 1900; catalogues published after this period are referred to as Recent Catalogues. This division is arbitrarily made, but it has a certain justification because of the appearance of a new archaeological document type at the turn of the century (the oracle bone texts of Shang) and the development of a more critical attitude to the archaic texts generally as a result of the Anyang material, and also of the growing influence of Western research methodology.
1. In the twelfth month, the second quarter of the month on the day, ting-

2. hai; the King caused Yi to review merits. Ordered Sheng-Pang to

3. call forth, awarded metal ornamented reins, banner. .... responded

4. extolling the King's grace; himself made (this) precious Ch'i-vessel; for a myriad years

5. let his grandsons and sons cherish and employ (it).

A vessel and lid set both contain this text; hand-copies were first published in the Ts'ung ku Catalogue (6/23a-b); a third vessel containing the same text appears in the Heng hsien Catalogue with a hand-copy of the text (p. 29b). Lo Chen-yü presents rubbings of the three inscriptions (San tai Catalogue, 8/49a-50b), the first two of which are particularly clear; they will be referred to in the order they appear in Lo's catalogue.

Text C can be disposed of first: it is a copy, very carelessly made, of texts A and B; the characters 肥 (line 2), and 午 (line 5) were omitted while 白 became 爰, 生 be-
came 午, and 霸 was written as two separate characters. The text reads from left to right with the elements of the character 倒 reversed and the 'hand' element of 对 omitted; the reversed sun-tzu phrase is maintained and other features of texts A and B, e.g. the normal and reversed inner elements of the two characters 霸 are also duplicated.

Text A is obviously a fake from the point of view of the poorly written characters and the general appearance of the inscription; with 寸 written as 寸; 篇 as 篇; 範 as 範; etc. no one familiar with the archaic script could possibly feel justified in accepting the document as a genuine Chou period writing. Elements of characters are written inconstantly: the 'hand' elements in 事 and 对; the 'dagger-axe' elements in 莫 and 戦. Various characters are incompletely engraved and variations between identical characters in the lid and vessel texts may be observed. Some characters are reversed mirror-fashion (午 and 难).

Lines 2-3 do not read well; even if 戦 were treated as a verb, there still remains the difficulty of forcing sense from the character 午. The use of 自 in line 4 is contrary to Western Chou usage, so too, the characters 自车 in the last line; the mistaken use of 车 as 乃 (transcribed thus in Sung and Ch'ing times and regarded as the pronoun 'your') is to be observed in line 3 which is essentially part
of the King's written command.\textsuperscript{37}

(a) elements of characters inconstant,
(b) erratically written characters,
(c) incompletely written characters,
(d) normal and mirror-reversed characters,
(e) elements of identical characters reversed,
(f) important characters omitted,
(g) characters incorrectly copied in a later 'discovered' inscription,
(h) incorrect use of characters,
(i) muddled context,
(j) character used in sense of incorrect Sung period interpretation,
(k) month-quarter (?)
(l) review merits phrase (?)

2. ins. H7.1 The K'ang Yi.

1. In the fourth month, in the first quarter

\textsuperscript{37} The text of the King's command which was written on a tablet and read out to the investee during the ceremony finishes at 'state' in line 3. It is customary in Western Chou style inscriptions for the investee to record the actual wording of the tablet or of important sections of it; the investee does not simply render it into indirect speech to suit the remaining contents of the inscription. Pronouns employed by the King remain in the first person (e.g., ins. S.156.1, T.147.1, 122.2, 110.1, etc.); those directed towards the investee remain in the second person. The pronoun 他 has only recently been recognised as 好 and previously was interpreted as 亦, either in the sense of 'thereupon' or as a pronoun 'your'; 亦 (archaic 亦) is found only in the sense of 'your' (cf. Wu Ch'i-ch'ang's discussion, Yenching Journal of Chinese Studies, vol. 9, p. 1716; article on ins. H7.1).
of the month, on the day, chia-wu, the excellent King was in

2. the Archery Hall and (made) conducted the Elephant Mime. Ku'ang commenced the Elephant Music (and completed) the second (stanza).

3. The King said: "Rest!" Ku'ang made obeisance with his hands, bowed low his head and responded extolling the Son of

4. Heaven's great and illustrious grace; therefore made for accomplished deceased father, Jih-Ting,

5. (this) precious Yi-vessel. May grandsons (?) and sons forever preciously employ (it).

In his T'iu lu Catalogue, (67b-68a), Kuo Mo-jo has reproduced two different rubbings of this text; one is similar to the San tai Catalogue rubbing (10/25a) which has several characters missing from the upper and lower sections of the text; the second rubbing contains the missing characters. We are by no means certain that this text does indeed contain the reversed sun-tzu phrase. Kuo interprets it as such, taking the first 孙 as being 孫.

38. Kuo interprets 鱼 as 慷, the name of the seventh King of Chou (933-906); this may have been the interpretation intended by the compiler.
because of the small stroke on the lower right-hand side of the curved vertical body stroke. This he evidently considers to be an incomplete 兎 element. The San tai Catalogue rubbing is a different rubbing from its counterpart in Kuo's catalogue; Kuo's second rubbing is a third rubbing. With three different rubbings to work from we might justifiably expect more than this slight stroke to appear to prove Kuo's thesis. No such indication is given; on the contrary it is shown plainly enough that only this small stroke exists and nothing more, (cf. Shih ku Catalogue, 3.1/32a). The phrase is a 丰丰 phrase, not a reversed or a normal sun-tzu phrase. This text is included here on account of Kuo's interpretation.

The inscription is a fake: elements of characters exhibit inconstancy, e.g. the 'enclosure' elements of the characters 亀; the 'head' elements of 顚, 首, and 顔. Several characters are erratically written: 見 for 見; 諸 for 諸; 寶 for 宝; 諭 for 諭; etc. The inscription reads smoothly if interpreted as Kuo Mo-jo has suggested (K'ao shih, p. 82b-83a) but the compiler seems to have omitted an important section of the record - the award received by Ku'ang for his commendable efforts. There does not seem to be much point in recording the fact that the King merely said: "Rest!" (休 may be interpreted as 'good', 'approve', etc. which might also be applied here), then to continue the text in the normal
investiture ceremony style.

In transcribing the archaic script Wu Shih-fen has rendered the two \( \frac{3}{5} \) \( \frac{3}{5} \) characters as \( \frac{3}{5} \) \( \frac{3}{5} \), an interesting illustration of the propensity of Chinese to accept the normal phrase in preference to the reversed one.

(a) elements of characters exhibiting inconstancy,
(b) erratically written characters,
(c) important section of text omitted (?),
(d) month-quarter (?).

3. ins. 48.4. The La Yi.

1. In the fifth month the King was in ..., the day being ting-

2. mao. The King made the Ti sacrifice (and) sacrificed an animal in the Great Hall.

3. (He) made the Ti sacrifice to Chao-Wang. La ..., the King. Awarded La with

4. cowries - thirty strings. Son of Heaven a myriad years. La responded

5. extolling the King's grace; therefore made (for) Huang-Kung (this) honoured


Wu Ta-ch'eng's rubbing (Chia chai Catalogue, 4/21b) is clearer
than that reproduced by Kuo (T'u lu, p. 31a), but both should be studied together. With the exception of the 'cowrie' element, characters exhibit constant structures; erratically written forms appear, however: 唯 as 唯; 萬 as 万; 眼 as 眼; 萬 as 万; 刀 as 刀。The 'Son of Heaven ten thousand years' is a most obvious muddling of the text as may be seen upon comparison with numerous other inscriptions; we consider an example such as this to be definite proof of forgery. It may be noted, too, that it is placed erroneously in the text of the King's command.

(a) erratically written characters.
(b) muddled context,
(c) elements of characters inconstant (?).

4. ins. 52.1 The Shih T'ang Fu Yi.

1. In the twelfth month, in the first quarter of the month, on the day,
2. ping-wu, the King was in Chou Hsin Ancestral Temple,
3. in the Archery Hall. The King called forth Tsai-Ying
4. awarded .... bow, ivory (?) bow, arrows,
5. .... red .... Shih-T'ang-Fu made obeisance and
6. bowed low his head; made (for) my accomplished deceased father,
7. X-Shu: (this) Chiang-Yi-vessel. May for a myriad
8. years grandsons and sons forever preciously employ (it).

Hand-copies of this inscription in the Ch'ang an Catalogue (1/6b) and the Chün ku Catalogue (3.1/35b) are the most convenient for study; rubbings are not very clear (e.g. Ch'ia chai Catalogue, 4/28b). The general appearance of the script is almost sufficient to condemn the inscription; several characters are written incorrectly: 裨 as 明; 蘧 as 傳; while others are most inartistically drawn: 令 for 初; 新 for 新; 与 for 師; etc.

In the first four lines of the text, the investee is not mentioned at all; after the enumeration of the benefices his name first appears and is followed by an incomplete rendering of the 'obeisance-extol' phraseology. The King receives no recognition at all here, a strange omission in view of nearly all other examples.

(a) erratically written characters,
(b) very roughly executed script,
(c) omission of important phrases,
(d) month-quarter (?).
5. ins. 66.1 The Shih Chü Yi.

1. In the first month, in the second quarter of the month, on the day, ting-yu,

2. the King was in Chou K'ang Apartments (of the palace). Feasted and (drank) sweet spirits. Shih-

3. Chü reviewed the merits (of?) Yu. The King called forth Tsai-Li

4. to award Shih-Chü with jade sceptre - one; jade insignia -

5. four. Shih-Chü made obeisance, bowed low his head and dared to respond

6. extolling the Son of Heaven's great and illustrious grace. Therefore made (for)

7. accomplished ancestor, Yi-Kung, (this) honoured Yi-vessel. To be employed in

8. prayers for a myriad years without limit. A hundred generations (of) grandsons and sons forever cherish it.

A vessel-text and a lid-text are reproduced in the Chia chai Catalogue (13/9a-b); Shih-Chü in this inscription is the same person as in ins. T.56.1 examined in the previous group. However, character structures, considerably between this early 'dis-
covered text and the present two inscriptions:  and  \\
 and  ;  and ;  and ; etc. The 
 vessel and lid texts also exhibit structural variations of 
 identical characters:  and ;  and ; and possibly others (the vessel-text is only partly cleared of 
 patina). There is, however, a certain identity of characters 
 between ins. T.56.1 and the present lid-text, cf. the characters 
 佳 (line 1); 月既生霸 (line 1); 王才周 
(line 2); 目世孫子永霸 (line 7, 8). Ins. T, 
56.1 and others, which may be discovered upon a more exhaustive 
survey, were directly copied in compiling the present inscriptions. 
Inconstancy of character elements is to be observed 
in a few cases within the inscriptions:  and (lines 1 
and 2); the 'head' elements in  and (lines 5 and 6); 
在 and  in the vessel-text.

The context generally reads well except in line 3 where 
the 'review merits' phrase appears to be incorrectly used; this 
is due to the character  placed at the end of the sentence. 
The person whose merits were reviewed must have been Shih Chü, 
the investee, but the additional character, Yu, upsets this 
interpretation. Yu is also found in ins. T.44.1 as a proper 
name, and is likewise connected with a 'review merits' phrase 
there.

(a) structures of identical characters in vessel 
and lid texts inconstant,
(b) character structures in a series of inscriptions pertaining to the same person inconstant,

(c) character structures and elements inconstant,

(d) confused context (?),

(e) month-quarter (?),

(f) review merits phrase (?).

6. ins. 65.1 The Ch'ih Yi.

1. In the third month, in the first quarter, on the day, yi-mao, the King was in

2. Chou and arrived in the Great Hall. When all was ready, Ching-Shu entered and assisted on the right;

3. Ch'ih. The King called forth the Nei-Shih, to read out the decree to Ch'ih;

4. Continue in his predecessors' appointment. Award Ch'ih with .... robes,

5. brown (?) knee-caps, pearl coloured jade sceptre, banner. Ch'ih made obeisance and bowed low

6. his head extolling the King's grace responding. Ch'ih reviewed merits therefore made this valuable and honoured Xi-vessel. Generations, grandsons and sons
8. do not dare to cause ruin, forever value (it). In the King's second year.

This inscription was one employed as a prototype during the compilation of ins. 71.2; the whole of the first line was directly incorporated and portions of the second (see p. 196). The script is quite well executed and does not give much cause for suspicion; the context, however, offers conclusive proof: line 4 is part of the King's recorded speech in the document read out during the ceremony. In the great majority of cases the context is directed towards the investee; here, unfortunately, the forger employed the third person pronoun 予 (modern 与) instead of 乃 'your' (see ins. 100.4, 121.2, 1395.1, etc. for examples of this same sentence with the correct pronoun). He relied upon contemporary and earlier interpretations of 乃 as 乃, and hence his mistake. In line 6 the 'extol' phraseology became a little confused and somehow the character 對 was written after 休 instead of before 驅. In the last line the 'do not dare to cause ruin' seems quite out of place. The last characters of lines 7 and 8 rhyme (子 and 祀) - this is probably coincidental as the numbers of characters per line are uneven.

(a) muddled context,

(b) incorrect use of character,
(c) month-quarter (?),  
(d) review merits phrase (?),  
(e) character used in sense of incorrect Sung period interpretation.

The Reversed Sun-Tzu Phrase in Recent Catalogues.

1. ins. 10,3  The Kung Yi.

1. Kung made (this) precious and  
   honoured Yi-vessel.

2. May grandsons and sons forever employ  
   (it).

The inscription, which appears in the recently published catalogue of the Pillsbury Collection (p. 64), offers little evidence of forgery other than the reversed sun-tzu phrase; the characters are not particularly well executed, e.g. the character 'Yi-vessel' and the tzu element in 'grandsons and sons'; the type of arm is found in some Shang style texts and a few Chou period ones in the character 但 39, but in the case of 孫 the element 是 is almost invariably used. In commenting upon this inscription Professor Karlgren says:

'The inscription (figure 36) reads: 'The Prince has made the precious vessel; may grandsons and sons forever use it.' The ductus of the script is typical Early Chou.' (loc. cit., p. 64).

39. Usually in the sense of a proper name or as the cyclical character 乙.
It would seem to us difficult to class so few characters in a more or less definite period especially as they are common forms that may be paralleled in bronzes of both Western and Eastern Chou. They actually appear as copies from several originals dating from Early Western Chou to Eastern Chou.

2. ins. 13.2 The Yi Tzu Lü Yi.

1. Yi Tzu Lü made (for) Fu Wu (this) valuable and

2. honoured Yi vessel. May grandsons and sons forever value (it).

Other than the reversed sun-tzu phrase, this inscription (San tai Catalogue, 3/29a) offers little evidence of forgery. Characters are quite well written but one, namely 亜, is reversed mirror-fashion.

(a) reversed and normal characters.

3. ins. 16.9 The Chou X Sheng Kuei.

1. Chou X Sheng made (for) Mu-

2. Yuen X (this) bridal-gift Kuei-

vessel. May

3. grandsons and sons forever preciously employ it. Clansign.

A rubbing is reproduced in the San tai Catalogue (7/46a); it
will be noted that the 'cowrie' element is written as \( \text{\ding{176}} \); the 'ting' element similarly has a vertical line through its centre.

(a) erratically written characters.

4. ins. \( \text{22.5} \) The Hsiang K'o Kuei.

1. In the King's fifth month on the day chia-
2. yin, Hsiang-k'o made (this) Lu-Kuei-vessel
3. K'o, may he live a long life, for a myriad
4. years grandsons and sons forever value and employ (it).

Rubbings of two inscriptions (probably vessel and lid texts) appear in the San tai Catalogue (8/20a); the inscriptions are particularly well written and do not give any cause to be suspected. The reversed sun-tzu phrase is not in a position of rhyme.

5. ins. \( \text{14.3} \) The Wu Kuei.

1. Wu made (this) precious Kuei-vessel to be employed in
2. preparing rice. His grandsons and sons, his (?) this (?)
3. great fortune. may . . . . .
Reproductions of both the vessel and its inscription appear in the Shih erh chia Catalogue; the use of 亝 is strange, particularly in the second occurrence - this and the following characters do not make sense. Erratically written characters: 餜 and 遗 appear; the 食 elements are inconstant while the general nature of the archaic script creates a most unconvincing appearance.

(a) character elements inconstant,
(b) erratically written characters,
(c) meaningless group of characters.

6. ins. 25.5. The Po Mu Kuei.

1. Po-Mu made (for) his .... Hall (this) precious Kuei-vessel;
2. to be employed in the pursuit of . deceased father . to his august deceased father . (particle) . to be
3. employed in prayers for .... a myriad years grandsons and sons forever value (it).

A rubbing of this inscription appears in the San tai Catalogue
(6/52a); the script does not show many features to be suspected; we might note, perhaps, the characters 皇 and 禹 which are not correctly written. The context, however, offers proof of the forgery in line 2 where the first character 考 is used in the sense of 孝; the particle 唯 is not required here at all unless it is to be interpreted as the name of the deceased parent?

(a) incorrect use of characters,

(b) erratically written characters.

7. ins. 27.8 The X Kuei.

1. In the eighth month, in the second quarter of the month, X

2. made (for) accomplished ancestors and deceased father (this) honoured and precious

3. Kuei-vessel; to be employed in .... in the Ancestral (Temple) Hall. X

4. may for a myriad years grandsons and sons forever value (it).

\[40\] Instances such as this would be explained as 'loan' usage but as both characters were in existence and both used quite often, it would seem strange if a Chou period scribe did not take care to differentiate them when writing them in the same line of text. If 'loan character' usage was common in Chou times, it would be most unlikely that such common characters would be loosely interchanged; the example above is obviously a mistake of one unused to writing in the archaic script,
The inscription is reproduced in the San tai Catalogue (8/32b); only the character 鉏 indicates the forgery—it is written 銄, with the 'moon' element missing and the 革 element drawn horizontally! The 'precious and honoured' phrase is reversed, a feature rarely found in this commonly occurring phrase; note also the omission of a day-date after the month-quarter, and no mention of the autive inscription of 乙 to be the (a) erratically written character,
(b) reversed tsun-pao phrase (?),
(c) month-quarter (?), the characters 目月 being omissible,
(d) omission of necessary characters.

8. ins. 294. The Yi T'ung Shih Yü.

1. In the first month, in the first quarter, the day, szu-yu, Ch'ü-

2. Wang, Chi-Mi(?)'s grandson, Yi T'ung, made

3. cast (this) Shih-Yü-vessel (particle).

4. eternal longevity employ it.

A rubbing appears in the T'ü Lu Catalogue (p. 165a). Kuo Mo-
jo interprets the archaic forms: 甲 戈 酉 as 乙己酉, noting that earlier doubts as to the authenticity of this in-
scription were based on a misinterpretation of the three char-
because of the uneven numbers of characters in two lines. It may, of course, be merely a coincidence that rhyme was effected and, in any case, if we accept the reversal as a result of rhyme, the inscription will not necessarily be genuine. The faker definitely left his mark in the first line of the text,

(a) meaningless group of characters,
(b) incorrectly used character (?),
(c) month-quarter (?).

9. ins. 31.3 The X.X.Yi.

1. X-X together with Tsu (?), the clansmen, extolled, and therefore

2. made (for) high and accomplished deceased father, Fu-Kuei, this precious and honoured

3. Yi-vessel to be employed in sacrificing (?) (to) accomplished deceased father, Li-Yü. May for

4. a myriad years ...., grandsons and sons value ....

This is one of a number of rubbings obtained by Umehara Sueji during a recent trip abroad; he has stated that it is definitely a cast inscription and in his opinion it is consequently a genuine document. It has not yet been published.
The first two characters form a name; the first six characters are intended to be a sentence, but cannot possibly make sense - this is mainly due to the character 爽 at the end of the 'sentence'. Other points in the context may be observed; in no other inscription is 'high' used before 'accomplished deceased father'; the name 'Fu-Kuei' is written as separate characters which feature is rare; in the second mention of the 'accomplished deceased father' an entirely different name appears - this is the only example of so strange a feature in the bronze texts. The characters do not form a meaning and 用 used as a name occurs in ins. 4644 examined earlier - there can be little doubt that they are to be interpreted as the name of the deceased father. The last character is not entirely clear but appears to be a clansign; in the context of this part of the inscription the characters 永 and 用 are conspicuously absent, and the resulting text appears confused.

Characters are neatly drawn but some evidence of the for- gery is to be noted in several erratic structures: 賣 for 遽, 訊 for 達, 餘 for 餘, 政 for 政. (a) erratically written characters, (b) meaningless groups of characters, (c) omission of necessary characters, (d) confused context.
10. ins. 31.5 The Shu Chia Fu Ku'ang.

1. Shu-Chia-Fu made (for) Chung-
2. X, (this) Ku'ang-vessel; to be employed (in) ....
3. ....; to be employed (in) .... the former ....
4. .... ....; to be employed in prayers for a ripe
5. old age without limit .... virtue
6. not .... grandsons and sons ....

The inscription is reproduced in the San tai Catalogue (10/22b). Several characters defy transcription and thus a complete translation is not possible. We consider the use of 考 for 壽 (archaic sounds: հագ and ձաղ) to be a visual error, for the upper elements in the archaic script are identical; it can hardly be suggested to be a case of phonetic loan, as in every example where 'longevity' is required, 壽 is written. We shall simply record the feature as:

(a) incorrectly used character.

11. ins. 40.5 The X Ting.

1. In the King's ninth month, in the third quarter of the month, on the day, yi-
2. tsu. Ch'ien-Chung commanded X to take
3. charge of the Yu fields. X made obeisance
   bowed low his head and
4. responded extolling Ch'ien-Chung's grace;
   therefore made (for)
5. my accomplished deceased father Li-Shu
   (this) honoured
6. Ting-vessel. May grandsons and sons, may
   (they) forever value (it).

A rubbing is reproduced in the San tai Catalogue (4/21b) and
exhibits clearly the poorly drawn characters; many are written
erratically: 他們; 他們 (他們); 他們 (他們). The character 他們 illustrates an aspect of the
carelessness of the writer: 他們 was written but as insuffi-
cient space remained for the 'cowrie' element it was engraved
much lower: 他們. Inconstancy of structures occurs in the
elements of 風 and 風; in the characters 風 and
風; in the 'moon' element of 風 and 月. In the con-
text it will be observed that no award of benefice is recorded.

(a) inconstancy of character elements,
(b) erratically written characters,
(c) omission of important section of text,
(d) general appearance of inscription,
19. ins. 53-2 The Yu Yi.

1. In the sixth month, in the second quarter of the month, the stately and solemn King was in

2. Piang-Ching, fishing in the great moat.

The King gave a banquet

3. Yu served without error (?). The stately and solemn King himself rewarded

4. Yu with a Tsueh-vessel (?). Yu made obeisance with his head and bowed low his head and dared to respond

5. extolling the stately and solemn King's grace. Therefore made (for) accomplished deceased father, Fu-

6. Yi, (this) honoured Yi-vessel. May grandsons and sons forever value (it).

The inscription appears in the San tai Catalogue (8/52b). The script is very well drawn and exhibits only one suspicious feature - the reversal of the lower elements of the character. 郝. The 'obeisance' phraseology (line 4) seems confused.

(a) elements of character reversed,

(b) month-quarter (?)

1. Great and illustrious august ancestors and deceased father. Solemnly and reverently could (they) proclaim their virtue. (Their) spirit

2. is on high. (They) extensively assisted their grandsons and sons below and advised (?) (them) in (their) great service.

3. Fan Sheng do not presume not to take as a model the august ancestors' and deceased father's great and illustrious original virtue. Therefore enlarge upon the great decree; make secure the royal throne; reverently from morning to night everywhere

4. seek out (those who) greatly err (against) virtue; therefore remonstrate (throughout) the Four Quarters (of the Kingdom); make docile those afar and assist those nearby.

5. The King

6. commands and superintend the Kung-
Tsu, the Ch'ing-Shih and the Ta-Shih-Liao. Take these twenty

7. articles; award: red knee-caps, onion-green gem (for girdle pendant); sword ornaments (for lower part of scabbard and upper part of hilt); jade circlet; jade ...., cross board for

8. back of chariot, an ornamented net to place around the protruding rails of the upper part of the chariot box, leather trappings lacquered in red, a tiger decorated cover with black interior,

9. cross-piece for chariot shaft, right-hand portion of yoke, leather strap with designs marked on it, ornamented hub-cap, metal bell, metal ....,

10. metal mesh, a fish-pattern mesh, red banner, metal .... - two. Fan-

11. Sheng dared to respond the Son of Heaven's grace; therefore made (this) Kuei-vessel. Forever cherish (it).

This long inscription was first published in the T'ao chai Catalogue (2/16b) comprising objects in the collection of Tuan
Fang; the text occurs in a Kuei-vessel lid but there seems to be no record of a vessel-text. Characters are quite well drawn although some of the more complex ones cover the space of two normal characters; the script has much in common with that of the Mao Tung Ting, and as far as the content is concerned, most of the phrases and characters may be paralleled with the earlier 'discovered' inscription.

Except for the last line, the whole text is a record of the command issued to Fan Sheng by a King of Chou who, contrary to all other examples of this inscription type, exhorts his vassal to emulate the virtuous conduct of his (the King's own) predecessors. The phraseology concerned occurs often in the inscriptions and is invariably employed by the King in reference to his own ancestors and in relation to his own conduct. To his vassals he quotes the examples of the good conduct of former ministers and requests that his vassal will imitate their good actions; only in this inscription does he confuse the matter. In the last line the 'extol phraseology' and the 'descendants phraseology' is so greatly abbreviated that particularly important characters and phrases, such as 扬, Fan Sheng's ancestor, and 'descendants' have been omitted. In comparison with the detail of the whole text it would be expected that the last section should be written a little more fully than this.
(a) muddled context (?),
(b) omissions of characters and phrases (?).

In recent searches amongst the catalogues a further early Ch'ing Catalogue inscription relevant to the present investigation was noted: ins. T.21.9. The text reads:

ins. T.21.9 The Chou Kung Ku.

1. Chou-Kung made (for) Kung-Jih-Szu
2. (this) honoured Hu-vessel. May (it) be employed in sacrifice
3. in the Ancestral (Temple). May grandsons and sons for
4. a myriad years forever value and employ (it).

Clansign.

A vessel and a lid each containing this text appear in the Hsi ch'ing Catalogue (19/11b); a further set is in the Hsi chien (A) Catalogue, the lid of which is reproduced also in the Chi ku Catalogue (5/11a). Inconstancy of identical characters in the vessel-lid texts of the latter set may be observed, while inconstancy of identical characters generally holds throughout the four individual inscriptions. The characters

41. Five Recent Catalogue Inscriptions: 10.12, 10.13, 11.7, 14.20, and 22.2 were overlooked during the writing of the present Section; they are incorporated in Table No. 8 following without detailed discussion here. The three inscriptions analysed after T.21.9 are to be found in sources which have only recently reached us.
and 鏟 are reversed mirror-fashion. These are the main features causing suspicion to fall on the two sets, but the Kši ch'ing Catalogue set does not exhibit inconstancy between vessel and lid inscriptions, and thus has some claims to authenticity. The 'descendants' phrase is normal in the four inscriptions.

In the San tai Catalogue are rubbings of two further sets with the same inscriptions in the vessels and the lids. They are definitely different objects from those recorded in the Imperial Catalogues; inconstancy is to be noted between vessel and lid texts in each set. Both vessels contain the reversed sun-tsu phrase while the normal phrase obtains in the lid texts. It is quite obvious that the later vessel-lid sets are forged copies of the earlier and as such exhibit quite clearly that the reversal of the tzu-sun phrase owes much to careless compilation.

Three other inscriptions with the reversed phrase have recently become available:

ins. 327,5 The Pei Kuei.

1. In the first month, in the first quarter of the month, on the day, ting-mao, Pei
2. accompanied (?) the Duke. The Duke awarded Pei sacrificial Yi-vessel - one item,
3. awarded Ting-vessels - two, awarded
cowries—five strings. Pei responded

4. extolling the Duke's grace; therefore made
   (for) Hsin-Kung (Duke Hsin)

5. (this) Kuei-vessel. May for a myriad
   years grandsons and sons value (it).

Ch'en Meng-chia reproduces a rubbing of the inscription
in the K'ao ku hsüeh pao, vol. 11, p. 62; he states that
the vessel was unearthed in Honan round about the period
of 'liberation', no authority for this vague testimony
is given. Inconstancy seems to appear in the elements
of several characters, but unfortunately the characters are
not all clear. Otherwise the inscription offers little
other than the reversed sun-tzu phrase to cause it to be
suspected. In the same issue of this bulletin is another
inscription reproduced with the reversed phrase which exhibits
clear proof of forgery (p. 61):

ins. 52.4

The Erh Yi.

1. In the sixth month, in the first quarter of the
   month, the day being hsin-

2. mao, the Marquis arrived at the Erh ....
   The Marquis (bestowed) grace

3. on Erh, awarded serfs—ten families.
   The Ch'ang-Shih (official),
4. Erh, responded extolling the Marquis's grace and commenced (?) diligently (?) made (for) Ching-

5. Kung (this) precious and honoured Yi-vessel.

Ching-Kung, grandsons and sons

6. value (it). Marquis, a myriad years obtain longevity (until) yellow and

7. wizened. Erh daily receive grace.

In his commentary on this inscription Ch'en Meng-chia (p. 82) notes the unusual presence of rhyme in the last two lines of the text - this is seldom seen in Western Chou bronze texts. He points out the correspondence of the phraseology in line 6 with traditional examples (c.f. Shih, ode 172.5: 'how should he not have a high old age?'); it is, indeed, the only inscription to employ the term 'yellow and wizened' in the 'longevity' phraseology. The phrase 柒考 is not unknown in traditional literature and appears in the fully attested Ts'ai bronze, ins. 22.1, as 考壽。It is, however, rarely seen amongst the general body of inscribed bronzes which, in the great majority of cases, employ the眉壽 phrase. Erratically written characters, e.g. 亙, 眉, 眉, 眉, etc., may be observed, while the element 才 in three characters is constructed inconstantly. Intrinsic features of the script cause doubt as to the authenticity of the inscription.
In a reproduction of Ch'ien Chieh-ch'i's handwritten list of vessels in the collection of a Mr. Liu, Tung yu Liu shih k'uan chih (p. 3a), is copied out in full an inscription not available to us in the form of a rubbing. It comprises 47 characters amongst which a few groups actually make sense - the whole document, however, is merely a jumble of nonsense and no translation will be attempted. A reversed sun-tzu phrase is incorporated in the text; it carries the serial number 1422.

The 48 inscription texts appear on 88 vessels and lids; amongst these the reversed sun-tzu phrase is found in 75 of the documents, three of which are uncertain cases; six are declared forgeries by other scholars. Of the total, 32 of the documents are merely copies of pre-existing originals; 9 of these have the reversed phrase written normally while 3 with the reversed phrase are copies of originals which have the normal phrase; in two cases of vessel-lid sets the reversed phrase occurs only in the lid-texts. In 4 series of inscription

42. It will be realized, of course, that the later 'copies' cannot always legitimately be asserted to be actually copies of the first published inscription - there is always the possibility that several of the series were manufactured at the same time. However, where dates of publication of later additions to the series are far removed from the earliest published reproductions, the later 'discovered' or published inscription is tentatively classed as a copy of the original and regarded necessarily as a forgery. If it can be shown that any 'copy' was actually discovered about the same time as the original, our classification of it both as a copy and as a forgery will have to be re-assessed.
texts, totalling 19 individual documents, are 5 cases of reversal - the remaining 14 tzu-sun phrases are normal. Further interesting features may be studied in the appended Table summarising the suspect features analysed; of the more important we draw attention to the high proportion of faked copies made of Sung and Ch'ing Catalogue texts; original inscriptions 'discovered' since 1850 have rarely been copied. Inconstancy becomes decreasingly evident from Sung to recent times, but discrepancies in the inscription texts show only a slight tendency towards improvement.

43. In both the early Ch'ing and Recent Catalogue groups, inscriptions of less than 20 characters should be disregarded in order to obtain a more reliable view of this feature. Short inscriptions seldom possess sufficient duplication of identical characters to allow inconstancy to develop.
**TABLE No. 3.**

Analysis of Inscriptions with Reversed Sun-tzu Phrase.

Asterisks preceding the inscription serial numbers denote in the Sung Catalogue group that the inscriptions concerned are faked copies made in Sung times; serial numbers which are underlined simply indicate that the inscriptions in question are faked copies of the earliest reproductions. Serial numbers preceded by a red circle refer to inscriptions accepted by eminent authorities as spurious productions.
### TABLE NO. 3

Analysis of Inscriptions with Reversed Sun-tzu Phrase

<table>
<thead>
<tr>
<th>No.</th>
<th>Inscription</th>
<th>Analysis</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>S. 30.7 (v.e)</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>2.</td>
<td>S. 30.7 (v.b)</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>3.</td>
<td>S. 30.7 (v.c)</td>
<td>...</td>
<td>...</td>
</tr>
<tr>
<td>4.</td>
<td>S. 41.1 (v.a)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>5.</td>
<td>S. 41.1 (v.b)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>6.</td>
<td>S. 41.1 (v.c)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>7.</td>
<td>S. 41.1 (v.d)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>8.</td>
<td>S. 65.2 (v.a)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>9.</td>
<td>S. 65.2 (v.b)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>10.</td>
<td>S. 65.2 (v.c)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>11.</td>
<td>S. 70.1 (v.a)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>12.</td>
<td>S. 70.1 (v.b)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>13.</td>
<td>S. 70.1 (v.c)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>14.</td>
<td>S. 70.1 (v.d)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>15.</td>
<td>S. 120.1 (v.a)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>16.</td>
<td>S. 120.1 (v.b)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>17.</td>
<td>S. 120.1 (v.c)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>18.</td>
<td>S. 120.1 (v.d)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>19.</td>
<td>S. 120.1 (v.e)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>20.</td>
<td>S. 120.1 (v.f)</td>
<td>A</td>
<td>...</td>
</tr>
<tr>
<td>21.</td>
<td>T. 10.6</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>22.</td>
<td>T. 12.15 (v)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>23.</td>
<td>T. 12.15 (l)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>24.</td>
<td>T. 12.16</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>25.</td>
<td>T. 13.4</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>26.</td>
<td>T. 14.9</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>27.</td>
<td>T. 14.1 (v.d)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>28.</td>
<td>T. 14.1 (v.a)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>29.</td>
<td>T. 14.1 (v.b)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>30.</td>
<td>T. 14.1 (v.c)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>31.</td>
<td>T. 14.1 (v.e)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>32.</td>
<td>T. 14.1 (v.f)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>33.</td>
<td>T. 14.1 (v.g)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>34.</td>
<td>T. 14.1 (v.h)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>35.</td>
<td>T. 16.9</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>36.</td>
<td>T. 21.9 (v.a)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>37.</td>
<td>T. 21.9 (l.a)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>38.</td>
<td>T. 21.9 (v.b)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>39.</td>
<td>T. 21.9 (l.b)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>40.</td>
<td>T. 21.9 (v.c)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>41.</td>
<td>T. 21.9 (l.c)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>42.</td>
<td>T. 21.9 (v.d)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>43.</td>
<td>T. 21.9 (l.d)</td>
<td>F</td>
<td>...</td>
</tr>
<tr>
<td>No.</td>
<td>T.</td>
<td>Value</td>
<td>Description</td>
</tr>
<tr>
<td>-----</td>
<td>------</td>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>44.</td>
<td>T.35.2</td>
<td>. . . DE</td>
<td>J*</td>
</tr>
<tr>
<td>45.</td>
<td>T.35.2</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>46.</td>
<td>T.55.2</td>
<td>. . . DE</td>
<td>JK</td>
</tr>
<tr>
<td>47.</td>
<td>T.66.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48.</td>
<td>T.67.2</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>49.</td>
<td>T.68.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>50.</td>
<td>T.68.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>51.</td>
<td>T.69.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>52.</td>
<td>T.69.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>53.</td>
<td>T.70.1 (v, b)</td>
<td>. . . DE</td>
<td>JK</td>
</tr>
<tr>
<td>54.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>55.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>56.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>57.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>58.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>59.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>60.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>61.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>62.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>63.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>64.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>65.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>66.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>67.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>68.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>69.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>70.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>71.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>72.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>73.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>74.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>75.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>76.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>77.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>78.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>79.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>80.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>81.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>82.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>83.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>84.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>85.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>86.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>87.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
<tr>
<td>88.</td>
<td>T.70.1</td>
<td>(v)</td>
<td></td>
</tr>
</tbody>
</table>
SECTION FIVE.
An Analytical Examination of Forged Bronze Inscriptions.

The criteria and suspect features established so far are those evolved from analyses of inscriptions determined as forgeries upon the basis of two criteria hitherto unknown and unexpected by earlier students of the inscriptions. Although their reliability cannot yet be assessed with absolute certainty, the fact that these features appear so often in bronze texts exhibiting inconstancy or in those containing prose use of the reversed sun-tzu phrase, seems to suggest that they are likewise acceptable proof of forgery. It is not the aim in this survey to attempt to discover conclusively whether the suspect features listed earlier (pp. 202-203) are all reliable indication of spurious archaic documents; this must await future investigation when a greater number of attested inscriptions can be consulted. In the present Section, however, it is proposed to advance a little further in assessing, in a tentative way, the possible value of the items previously analysed as criteria of forgery. An entirely new group of bronze texts will be examined. The 140 individual documents studied in Sections Three and Four comprise inscribed vessels hitherto generally accepted as genuine articles; the inscriptions now to be surveyed are all regarded by eminent authorities as spurious documents. A few have already been examined but the majority are entirely
new texts; they will not all be analysed in detail in the following pages, a selection of several of the more interesting cases only are presented, with detailed study of particular aspects of the inscriptions. Analyses of the remainder are tabulated as in the previous Sections.

A comparatively large group of forgeries exists in which the inscriptions are merely copies of earlier known inscriptions; a study of such cases may not at first appear to offer results of any value. As copies, the forged texts may only present evidence of slight or, occasionally, extreme errors in character structures; sometimes characters may be accidentally omitted; the text may be incorporated in a vessel of a different stylistic period; other such mistakes may occur. On their own, features like these may not appear to be significant, but if compared with similar features in unattested materials and a close identity of error-types is found, then it is to a large extent justifiable to assume that the errors in both cases were made by similar craftsmen working under similar conditions. If, therefore, known forgeries exhibit certain suspect features which obtain also in unattested materials, the latter must be viewed with suspicion, particularly when the same features are found completely absent in fully attested inscriptions.

1. See next Section for detailed study of fully attested inscriptions. Forged copies of earlier known inscriptions tend to be carefully made and the majority of characters are fairly exact copies of those in the original. However, occasionally the faker
328

Ins. S.30.7, for instance, was fraudulently copied in Sung times (see p. 233) and the inscription was first published in Juan Yuan's edition of the Fu chai Catalogue; at a later date a further copy was made which, although quite close to Juan Yuan's original illustration (measurements of length and width of the two inscriptions correspond exactly), manifests a number of variations: the placement of several characters differs as much as 2 to 3 mms, but generally the two inscriptions appear identical in this respect; Juan Yuan's copy has several badly corroded areas none of which appear in the later copy; several characters exhibit marked structural variations from the original:

- $\frac{1}{2}$ appears as $\frac{3}{2}$, $\frac{3}{7}$ as $\frac{3}{7}$, $\frac{3}{7}$ as $\frac{3}{7}$, $\frac{3}{7}$ as $\frac{3}{7}$; the obscure seventh character, $\frac{3}{7}$, in line 1 is boldly redrawn as $\frac{3}{7}$. Certain improvements in the drawing of the characters may be observed: $\frac{3}{7}$ as $\frac{3}{7}$; $\frac{3}{7}$ as $\frac{3}{7}$, $\frac{3}{7}$ as $\frac{3}{7}$, etc. The forger thus illustrates the fact that he had some understanding of the archaic script, but his knowledge was not sufficient to prevent his falling into several err. And it is in the study of the nature of such errors that definite forgeries of this kind become materials of considerable value. In the first place there is no doubt as to their fraudulence; secondly, in copying a complete text the forger is in much the same situation as a more enterprising person who may select characters and phrases from a variety of existing archaic documents - both will tend to err in much the same way.

2. We possess a rubbing of this later imitation incorporated in a collection of 92 rubbings of which only one or two have been published. The bulk of these are copies of earlier inscriptions, and we suspect that the collection may be a forger's record of his manufactures.
errors; the mistakes he made in copying are exactly like those classified earlier as 'erratically written characters'. The character 甲 is a clear example; in Juan Yuan's inscription it is written as 甲 and is consequently an incorrect combination of elements - the right-hand element should be 乙 not 甲. In the later copy the 乙 element was misunderstood and rendered as 乙 which may be transcribed as 乙 乙. Numerous cases of such features have been discussed or tabulated in preceding Sections.

Ins. S.26.7 illustrates similar phenomena in the several forged copies made in the 18th and 19th centuries; illustrations of all but one of the vessels containing the faked inscriptions are available and a comparative study may be extended to these also. The original vessel and its inscription was first published in the Po ku Catalogue (1/7b), and later appeared in the Li tai Catalogue (p. 13a) and the Hsiao t'ang Catalogue (p. 1a); the same original was reproduced in each case. In the Hsi ch'ing Catalogue (3/20a) a fairly close copy of the vessel (Po ku Catalogue, 1/7a) appears, but with considerable variation.

3. The original inscription (Hsiao t'ang Catalogue, p. 26a) has this character written with an erratically formed 乙 element which may have influenced the later copy. Other characters, including those noted above, are closer in structure to the earlier Sung Catalogue reproductions of the original inscription - these are all written in 6 lines. Thus it seems that the forger may have consulted both the later Sung imitation and the original when engraving his text; his correction of certain discrepancies in Juan Yuan's inscription are obviously based on the original inscription, but the incorrectly written characters are closer in structure to the former source.
in minor details, e.g. 'eyes' and 'horns' of the t'iao-t'ieh; there is not the slightest doubt that it is a case of two entirely different vessels. The later inscription exhibits certain variations (the Sung edition of the Hsiao t'ang Catalogue is used as a basis of comparison): the second character 亡 was omitted; mainwindow is written as mainwindow; mainwindow as mainwindow; mainwindow as mainwindow (i.e. mainwindow); etc. In the Hsü chien (A) Catalogue (1/13a) a somewhat unusual vessel with a t'iao-t'ieh resembling the Hsi ch'ing Catalogue example above (3/20a) contains the same text; the fourth and sixth characters do not appear probably because of uncleared patination; mainwindow is written as mainwindow; mainwindow as mainwindow; mainwindow as mainwindow; mainwindow as mainwindow; mainwindow as mainwindow; etc. The Hsü chien (b) Catalogue has a Fang-Ting-vessel with the same text which appears as an almost perfect copy of the inscription as reproduced in the Ming, Wan Li edition of the Li tai Catalogue; there could be no clearer proof of forgery for this edition is the most carelessly engraved of the various Sung Catalogues and

4. Ins. S.26.7 contains a very difficult text and problems of interpretation are, we believe, solely those of a corrupt compilation. In our opinion, the original is a forgery of Sung times exhibiting as it does meaningless groups of characters and employing the character mainwindow as the vessel-name. Kuq Mo-jo and Yang Shu-ta omit the vessel in their studies; Juan Yuan was the last scholar to write a commentary on the text. The writing of mainwindow as mainwindow in the Ch'ing catalogue inscription illustrates the forger's preoccupation with difficulties of interpretation which he thought might be resolved in part by this simple modification; the preceding characters read as 'twelve'.
is seldom consulted by present-day scholars.

The above three inscribed vessels in the Imperial Ch'ing Catalogues are classed as forgeries by Jung Keng (op. cit., Y.J.C.S., p. 830). Juan Yuan's Chi ku Catalogue (1.12a) contains a copy of ins. S.26.7 which is based on a rubbing taken from a fourth original. The same inscription is reproduced in the Chun ku Catalogue (2.3/57b). Two later illustrated vessels containing this inscription appear in the Chi chin Catalogue (3/25b) and the Liang lei Catalogue (1/3a); the latter vessel is a particularly good copy of the Po ku Catalogue vessel, the former is also similar but certain minor details in the decor differ considerably. The Liang lei Catalogue inscription has some features in common with that reproduced by Juan Yuan but there is reason to doubt that they are both from the same original; the Chi chin Catalogue inscription is a direct copy from the Wan Li edition of the Po ku Catalogue wherein the third

5. The edition in our possession is undated. Jung Keng (Chin shih shu mu lu, 2/5a) mentions an edition of the 16th year of Wan Li (1589) printed in red and incomplete in some pages; our copy is probably of this edition although the paper is more characteristic of the Chia Ching period. Although pages are numbered consecutively, several of the contents were omitted when the plates were engraved; the workmanship of the engraving is of a very low order. Inscriptions which may be determined as copies of the ill-drawn characters reproduced in this edition, in whole or in part, need little further investigation as to their fraudulence.

6. This edition is dated 1589; it is not mentioned by Jung Keng although he lists several printings made a decade or so later.
and fourth characters are rather carelessly engraved together thus: 而 while the remainder of the character 金 appears in its correct position. A rubbing of the Hsi ch'i'ing Catalogue inscription may be found in the Ch'ia ch'ai Catalogue (6/3b); the vessel was in Wu Ta-ch'eng's collection at this stage.

Six vessels containing the inscription text $S_26.7$ are thus illustrated and available for comparative study; for convenience they will be referred to in the ensuing discussion as:

vessel (1) : Po ku Catalogue (1/7a),
vessel (2) : Hsi ch'i'ing Catalogue (3/20a),
vessel (3) : Hsü chien (A) Catalogue (1/13a),
vessel (4) : Hsü chien (B) Catalogue (1/10a),
vessel (5) : Chi chin Catalogue (3/25b),
vessel (6) : Liang lei Catalogue (1/3a).

Vessel (1) is the original and is assumed here, merely for the

7. In the succeeding pages we digress slightly from the general study to present a series of observations related to the vessels and their decor, for the present group exhibits aspects of statements made early (pp. 47 ff.) which may be conveniently illustrated here. It is a partial investigation of problems in this field, and is intended only as an expression of certain inadequacies, as we believe them to be, in Karlgren's assertion that his chronological categories offer 'decisive proof of the general authenticity of both the inscriptions and the vessels' (Yin and Chou, p. 86). His classification of style elements in a chronological order is, no doubt, acceptable in a general sort of way but it does not seem to us to present absolute proof of authenticity in numerous individual cases. The numbers of vessels he has employed exhibiting inconstancy illustrates the danger of relying on the subjective judgement of even the best experts, while the inadequacy of stylistic criteria as proof of authenticity becomes quite evident.
purpose of the ensuing discussion, to be a genuine Chou period manufacture; the others are fakes - although Jung Keng has labelled only the three Imperial Catalogue inscriptions as spurious, the application of his principle (see p. 485, no. (a)) should be extended also to the inscriptions and illustrated vessels discussed above. In Ch'ing times there is recorded thus a total of 6 vessels (other than vessel (1)) containing the inscription, all of which are later copies.

If considered from a stylistic point of view, vessels (1), (2), (5), and (6) will be observed to manifest Karlgren's stylistic criteria; 2, 8, 15, and 29. Vessel (4) exhibits a long array; 1, 8, 13, 15, 17, 26, 29, 30, and 37. The five vessels are thus all consistent as Yin or Yin-Chou period artifacts, and contain an inscription which also is suitable for the vessel-types and their decor elements. Vessel (3), however, exhibits a mixture of both early and late elements; 15, 18, 29, 39, 49, and possibly 60. The prevalence of 49, 'curved legs' - a Middle Chou style characteristic - must be

8. Numerals represent the following stylistic features; 1 : square Ting; 2 : Li-Ting; 8 : cylinder legs; 13 : segmented flanges; 15 : t'iao-t'ieh; 17 : gaping dragon; 18 : vertical dragon; 26 : leg blade; 29 : spiral filling (i.e. lei-wen); 30 : spirals on figures; 31 : spiral band; 37 : 'T' scores; 39 : bent ears; 49 : curved legs; 60 : squat Ting. Nos. 2, 8, 15, 18, 29, and 31 are referred to constantly hereafter. It is assumed that the reader has access to Professor Karlgren's Yin and Chou in Chinese Bronzes, and no explanation of individual decor elements will be presented here.
regarded as a particularly suspicious feature. It exemplifies a type of carelessness that sometimes occurs in forgery but the remaining vessels give no indication of the fact that they are fakes other than the Sung Catalogue text incorporated within them; if it were a matter of a more original but suitable inscription they might not have been classified as spurious, or even have caused Jung Keng to suspect them. He considers the three Imperial Catalogue vessels to be spurious because of two reasons: (a) few if any of the original Sung Catalogue vessels survived the vicissitudes of nine centuries of dynastic changes and upheavals, (b) the 120 or more vessels illustrated in the Imperial Ch'ing Catalogues which seem identical with the Sung Catalogue vessels, or possess incorrect combinations of their decor and inscriptions, are obviously imitations.

The five forgeries with consistent stylistic features are not absolutely identical in detail. Vessel (4), being of an entirely different type, will be disregarded for the moment;

9. This comment is by no means facetious, for Jung Keng and numerous other experts have accepted scores of inscribed vessels with inscriptions exhibiting inconstancy of character structures; they were accepted mainly because there was no reason to suspect them - the vessels appeared to be of high antiquity and manifested various characteristics which it had been customary to associate with 'genuine' bronzes. The 6 illustrated vessels under discussion, moreover, were not suspected as fakes until recently; how many further forgeries remain after the application of Jung Keng's criteria is not yet ascertainable, but some indication is given as the result of our own study of the problem (see Major Table and comments in the Concluding Section).
the four vessels, (1), (2), (5), and (6) are all Li-Ting types exhibiting the four decor elements noted above. Vessel (1) was the prototype consulted, and its general features were maintained but not copied exactly; placed side by side they appear superficially the same; however, slight differences will be observed upon close inspection - shapes of 'eyes' and 'horns', placement of lei-wen pattern, etc. Each of the three Li-Ting copies were doubtlessly produced by different artisans, and as a result of independent manufacture based nevertheless on the same original illustration, variations on the decor themes developed. The present vessels offer thus an excellent object lesson of a phenomenon not restricted to spurious manufactures - identical decor elements will vary from one forgery to another; extensive studies have been conducted on such features in bronze vessels generally accepted as authentic, and similar variations have been commented upon. It is too early a stage to test authentic materials. Vessel (4), although containing several additional stylistic elements employs the t'iaoc-t'ieh decor (no. 15), with lei-wen background in exactly the same way as in the other vessels but the variation of this element is considerable. Vessel (3) also is consistent in this respect as far as the t'iaoc-t'ieh is concerned, but has added a 'vertical

10. See Karlgren: Notes on the Grammar of Early Bronze Decor, B.M.F.E.A., vol. 23; his useful collection of line drawings shows at a glance the numerous variations of detail in identical decor motives.
<table>
<thead>
<tr>
<th>Illustration of Vessel</th>
<th>Inscription</th>
<th>Decor Elements</th>
<th>Authenticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>40. 2/26a</td>
<td>nil.</td>
<td>2, 8, 15, 29.</td>
<td></td>
</tr>
<tr>
<td>41. 2/29a</td>
<td>nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
</tr>
<tr>
<td>42. 2/30a</td>
<td>nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
</tr>
<tr>
<td>43. 2/31a</td>
<td>nil.</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
</tr>
<tr>
<td>44. 3/36a</td>
<td>nil.</td>
<td>2, 8, 15, 29.</td>
<td></td>
</tr>
<tr>
<td>45. Hsu chien(B)</td>
<td>1/1a no.45 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
</tr>
<tr>
<td>46. 1/6a T.19.4</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>47. 1/20a no.47 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>48. 1/31a no.48 (III)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>49. 1/32a no.49 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50. 1/34a no.50 (IV)</td>
<td>2, 8, 15, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>51. 1/35a no.51 (IV)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>52. 1/42a no.52 (II)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>53. 1/43a no.53 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>54. 2/4a no.54 (III)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55. 2/7a nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>56. 2/8a nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>57. 2/9a nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>58. 2/10a nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>59. 2/11a nil.</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60. 2/12a nil.</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>61. Chi chin, 3/26b no.61 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>62. Heng hsien, p.7a no.62 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>63. p.6a no.63 (I)</td>
<td>2, 8, 15, 18, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>64. p.5a no.64 (II)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65. Liang lei, 1/3a ins.S.26.7(IV)</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>66. Ch'ang an, 1/4a no.66 (IV)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>67. T'ao ch'ai, 1/22a no.67 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>68. 1/26a no.68 (IV)</td>
<td>2, 8, 15, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>70. Cheng sung, A/8a no.70(III)</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>71. A/9a no.71 (III)</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>72. A/10a no.72 (II)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>73. A/16a no.73 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>74. Shih erh, /1b no.74 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>75. /1b no.75 (IV)</td>
<td>2, 8, 15, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>76. /17b no.76 (IV)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>77. Heusden, Pl.XV nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>78. Ackerman, p.14 nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>79. T'u lu, Pl.2 ins.22.10 (IV)</td>
<td>2, 8, 15, 29.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>81. B.M.F.E., 21/Pl.7 no.81 (III)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>82. 16/Pl.22 no.82 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>83. 9/Pl.7 nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>84. 9/Pl.8 nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>85. 9/Pl.9 nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>86. 9/Pl.9 nil.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>87. Pillsbury, Pl.2 no.87 (III)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>88. Cull, Pl.2 no.88 (III)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>89. Kanka, 1/Pl.7 no.89 (I)</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
dragon'-like element (no. 18) on each side. The t'iao-t'ieh shape varies much from the examples in the other vessels. Vessel decor thus is liable to differ from one imitation to another in much the same manner as shapes and structures of identical characters do in the inscriptions. The fact that it is a feature common to both faked vessels and unattested vessels is matter of particular concern; obviously fakers find the situation much to their advantage for it will not cause special comment if, for instance, their t'iao-t'ieh should contain, say, any one of the following eye forms - ❀; ❀; ❀; ❀; ❀; with or without an 'eye-brow' ❀. The combinations of such minor details have become so confused with succeeding 'discoveries' over the centuries that any new combination will easily establish itself in the general melee.

The forger must, of course, take care in combining the more general elements of the decor; his task is easy for he has available many prototypes from which to work, and if reasonably observant, will produce vessels that will not be easily detected as fakes. The Table opposite illustrates the point effectively; 60 Li-Ting-vessels appearing in the Sung and Imperial Ch'ing Catalogues with the stylistic criteria 2, 8, 15, 18, 29, and 31, are listed; a further 30 vessels 'discovered' since the early decades of the 19th century form the last section of the Table. The total of 90 vessels might possibly be augmented by another ten or more in catalogues not available
to us. However, they form a sufficiently complete group for a general study. Only one of the vessels (no. 2) is accompanied by a vague attestation; 15 are either suspected or classed as fakes by Jung Keng and a further one by Karlgren; one of these (no. 26) is dealt with in the preceding paragraphs, while in the last section of later 'discoveries' nos. 61a and 65 are the vessels (5) and (6) already examined. The materials thus offer 9 more definite forgeries (nos. 16, 17, 22, 25, 27, 38, 39, and 47) and 6 suspect cases (nos. 11, 13, 21, 24, 36, and 37). The inscriptions vary considerably and only two are immediately obvious as direct copies of Sung Catalogue originals. Vessels whose genuineness has not hitherto been held in doubt amount to 71 items; as in the cases of those determined as forgeries they manifest the same stylistic criteria and contain Shang or early Chou style inscriptions. Closer observation will show that identical characters differ in various respects from one vessel-text to another while items of decor exhibit mutual variations just as those noted in the 6 spurious examples.

Amongst the 90 vessels there are four combinations of stylistic features:

(1) 2, 8, 15, 18, 29, 31. (57: 3 Sung, 35 Ch'ing, 22 Later)
(2) 2, 8, 15, 18, 29. (17: 2 Sung, 11 Ch'ing, 4 Later)
(3) 2, 8, 15, 29. (12: 2 Sung, 6 Ch'ing, 4 Later)
(4) 2, 8, 15, 29, 31. (3: - , 2 Ch'ing, 1 Later)
<table>
<thead>
<tr>
<th>Group</th>
<th>Sung:</th>
<th>Ch'ing:</th>
<th>Later:</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group 1</strong></td>
<td>2, 3, 15, 29.</td>
<td>2, 8, 15, 29.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td>(1) forgery.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>2, 8, 15, 18, 29, 31.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(13) 4 fakes, 2 suspect.</td>
</tr>
<tr>
<td>Other Variations:</td>
<td>Ch'ing:</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>Later:</td>
<td>2, 8, 15, 18, 31.</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td><strong>Group 2</strong></td>
<td>2, 8, 15, 18, 29, 31.</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(4) 2 suspect.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>Other Variations:</td>
<td>Ch'ing:</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(1) suspect.</td>
</tr>
<tr>
<td></td>
<td>Later:</td>
<td>2, 8, 15, 18, 31.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td><strong>Group 3</strong></td>
<td>2, 8, 15, 18, 29.</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(6) 2 fakes, 1 suspect.</td>
</tr>
<tr>
<td>Other Variations:</td>
<td>Ch'ing:</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Later:</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Ch'ing:</td>
<td>2, 8, 15, 29.</td>
<td></td>
<td>(1) fake.</td>
</tr>
<tr>
<td></td>
<td>Later:</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td><strong>Group 4</strong></td>
<td>2, 8, 15, 29.</td>
<td>2, 8, 15, 29.</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2, 8, 15, 29.</td>
<td></td>
<td>(2) 1 fake.</td>
</tr>
<tr>
<td>Other Variations:</td>
<td>Ch'ing:</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(5) 2 fakes.</td>
</tr>
<tr>
<td></td>
<td>Later:</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td></td>
<td>Ch'ing:</td>
<td>2, 6, 15, 18, 29, 31.</td>
<td></td>
<td>(5) 2 fakes, 1 suspect.</td>
</tr>
<tr>
<td></td>
<td>Later:</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td><strong>Group 5</strong></td>
<td>2, 8, 15, 18, 29.</td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td>(no inscriptions)</td>
<td></td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2, 8, 15, 18, 29.</td>
<td></td>
<td>(2)</td>
</tr>
<tr>
<td>Other Variations:</td>
<td>Ch'ing:</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(10)</td>
</tr>
<tr>
<td></td>
<td>Later:</td>
<td>2, 8, 15, 18, 29, 31.</td>
<td></td>
<td>(6)</td>
</tr>
<tr>
<td></td>
<td>Ch'ing:</td>
<td>2, 8, 15, 29.</td>
<td></td>
<td>(1)</td>
</tr>
<tr>
<td></td>
<td>Ch'ing:</td>
<td>2, 8, 15, 29, 31.</td>
<td></td>
<td>(1)</td>
</tr>
</tbody>
</table>
Forgeries and suspect cases in each group are:

1. 5 fakes, 4 suspect.
2. 2 fakes, 2 suspect.
3. 5 fakes, -.

The fourth group is not represented by Sung Catalogue examples and the vessels have not been suspected. Inscriptions appear on 64 of the vessels and may be classified into four major types: Group 1 comprises Shang style inscriptions consisting of a symbol and the name-type 'Father - X'; Group 2 have the 'Ya' character as a major element of the inscription; Group 3 consists of various symbols usually without characters; Group 4 comprises long inscription texts. A certain relationship may be noted between decor combinations and inscription types; this is conveniently expressed in Table No. 5. Particular comment should be made on the tendency for Sung Catalogue examples to head each group, while sub-groups manifesting slight differences through the addition or the omission of decor elements are introduced by Imperial Ch'ing Catalogue examples and followed by later catalogue vessels. If all the inscribed vessels are genuine the Table illustrates a possibly natural feature; if, however, they are all forgeries the Table may likewise be regarded as a natural expression of the situation. As a rather large number of the vessels have been...
classified as forgeries it is indeed tempting to interpret the Table in the latter way, especially in view of the rather even distribution of 'fakes' and 'suspects' throughout the four groups. It is obvious that the alignment of decor groups and inscription types is not sufficient in itself as proof of the authenticity of the whole group of 90 vessels; moreover, the fact that each vessel exhibits concurrent stylistic criteria is even less proof of authenticity, for although several forged articles have been discovered amongst them on the basis of certain discrepancies in the inscriptions, there is no reason to believe that all such forgeries have been adequately determined. In particular there remains a group of 25 uninscribed vessels to which no acceptable criteria have been applied at all!

The Li-Ting-vessel type has been excavated under scientific conditions but, to the best of our knowledge, only one example has been unearthed. It differs from all the unattested examples

11. problems confronting students in this field; the general lack of acceptable testimony and the known prevalence of forgery. What is lacking is the existence of an adequate form of control outside of the general body of materials accumulated over the past nine centuries. The situation differs greatly from that of archaeology outside of China; although forgery is not unknown elsewhere it is not so crucial a problem in studies in other cultures, for scientific excavation of ancient sites has been in progress for many decades, and a scientific approach to the materials has developed as a result.

12. It is illustrated in the Chung kuo k'ao ku hsueh pao (continuation of the T'ien yeh k'ao ku pao kao) vol. 3. Plates 9/4 and 10/4 following Li Chi's 'Studies of Hsiao-t'un Bronzes'.

Figure 26(b).
and the vaguely attested vessel in the K'ao ku Catalogue in the placement of the legs - these slope outwards from the body of the vessel in a very pronounced fashion. The decor is one common amongst unattested bronzes but bears no relationship (except in location) to that of the present group. Stylistic comparison with attested Li-Ting-vessels is thus limited at present but it is clear from our preceding observations that authentic bronzes in the group will not be scientifically determinable until sufficient archaeological specimens are unearthed to prove that Li-Ting-vessels were produced in antiquity with the decor elements discussed above. The group as a whole is not to be cast aside, however, nor is Karlgren's stylistic criteria to be set at nought; all that we have attempted to illustrate here is the importance of employing considerable caution in utilizing unattested vessels in serious research. The forged examples are determined as such upon the basis of limited criteria, but because of their general similarity with the characteristics of the 'genuine' bronzes, the latter should be held in doubt until some suitable means of deciding their fate is discovered.

The inscriptions offer a certain degree of support to the possible authenticity of several of the inscribed vessels. At the conclusion of the list of inscriptions appended here are reproduced copies of all fully attested Shang and early Western Chou inscriptions published to date that may be used as a basis
Fully Attested Shang Inscriptions

Fig. 26(c)
of comparison. It should be observed that they occur in a variety of bronze vessels and other artifacts; there is, unfortunately, no example of a Li-Ting-vessel inscription. Early Chou types (nos. 7 and 9) testify to the general validity of Group 1 inscriptions. Shang 'Ya' inscriptions (nos. 14 and 22) suggest Group 2, nos. 5, 15, 37, 52, and 64 to be possibly genuine; early Western Chou No. 10 is identical with no. 37 of this group, but whether no. 24 may be accepted cannot yet be judged. Symbols and characters of Group 3 illustrate aspects in common with the numerous types amongst the attested inscriptions. Further than this little can be said, for the attested materials are not sufficient to allow a more detailed study; short inscriptions, moreover, are difficult and dangerous documents for such comparative investigation, and are particularly easy to copy. Increasing numbers of reliable examples may, however, lead to a knowledge of intrinsic features which have escaped the observation of forgers, meantime we must keep in mind the possibility that genuine-appearing short inscriptions may well have been fraudulently copied, even as early as Sung times, from genuine vessels now no longer recorded. 13

13. Long inscriptions in Group 4 are not compared here with fully attested examples as these are grouped together conveniently in the next Section. Later excavations will probably show whether inscriptions of considerable length were actually engraved in Li-Ting-vessels; nos. 3, 46, 68, and 79 may later be discovered to be types used in other kinds of vessels. Speculation of this sort, of course, leads us nowhere at present, for it is impossible to follow it up by active research. Nevertheless
Several forged inscriptions have been determined as such because the characters they contain are copies taken from the Stone Drum Texts, the Shuo wen, and other relatively late sources of archaic script. The Tsin Hou P'an is a striking example of this rather naive method of compilation; the vessel and inscription have been described in detail by S. W. Bushell, its first foreign owner, and it has been afforded considerable investigation by L. G. Hopkins, one of the foremost champions of its authenticity - 'opposed to the hosts of iconoclasts led by the great names of Chavannes, Pelliot, and Vissiere, and in England, of Professor Giles.' (The Bushell Bowl, J.R.A.S., 1912, p. 440). It is not proposed to study the inscription in such possibilities must be kept in mind and checked against each batch of new materials as they become available in illustrated journals. Gradually over the next few years problems of this kind will be solved to a greater or lesser extent.


15. Hopkins quotes Giles's arguments, but we have not access to those of the French sinologues referred to. That of Giles offers some points of interest - "With regard to the 'bowl' at the Museum, I gather from my own inspection of it, from a passing acquaintance with other bronzes, and from a careful perusal of the passages translated above, (1) that the bowl itself is of doubtful antiquity; (2) that the inscription was not cast with the bowl, as would have been the case with a genuine antique of the seventh century B.C., but was incised later; (3) that the inscription when cut was covered at once with a varnish-enamel to conceal the fact mentioned in (2); (4) that the bowl and its inscription have never been noticed by Chinese archaeologists, because it was known to be a fake, for which reason, too, it was readily allowed to slip, for a consideration, from the collection of the Imperial Prince who owned it; (5) that the argument against such a lengthy inscription is fully borne out
any great detail for there is ample literature available dealing with the subject; the characters are, for the most part, almost exact copies of Great and Small Seal forms and numbers are taken from the Stone Drum Texts as clearly illustrated by Hopkins (unwittingly) in his article referred to above. His list of characters in the inscription paralleled with Shuo wen forms, the Stone Drum Texts and oracle bone forms may be taken to present almost conclusive evidence of the forgery. The list is particularly valuable in its illustration of the method in which forgers have worked since earliest times in manufacturing faked inscriptions. Compared with the analysis of ins. 27.2 (pp. 207-209) and that of ins. 131.2 made later in this Section, Hopkins's table shows clearly how necessary it is to pursue investigations more thoroughly in respect to comparative studies of characters and phrases in the bronze texts. No attempt is made here to do more than refer to the method of inquiry required and the results that must surely obtain.

15. by a comparison which I have made with scores of inscriptions on ancient bronzes; and finally (6) that MM. Chavannes, Pelliot, and Vissiere may be said to have gained the day. Hopkins counters each argument (nos. 2-4) quite well with the materials at his disposal, and the knowledge of archaic documents which he had accumulated at that time.

16. Photographic copies of each inscription should be made and the individual characters cut out and pasted on cards prepared for the purpose. The characters should be classified according to structures and shapes. We would expect to find numbers of apparently unrelated inscriptions with many of their identical characters maintaining the same structural idiosyncrasies,
The inscription is obviously based on typical chapters of the Shu ching and has even incorporated material from the Tso chuan; in this respect it may be compared with the Mao Kung Ting, the Ta Yu Ting, the Shih P'ai Kuei, etc., which also were compiled with possible assistance from traditional texts. A few lines of Hopkins' translation will illustrate the character of this:

'It was in the King's first month, on the hsin yu day, that the Marquis of Tsin, having reported the subjugation of the Tartars, had audience of the King. The King thrice acknowledged the service - on the frontier, at his capital, and before the ancestry. He granted an audience in the Sacred Hall, and then gave the Marquis of Tsin a banquet in the Chou dynastic temple. The King rewarded the Marquis of Tsin for his services with a commission of authority over the Nine Tenures, and thus spoke the King: "Uncle, bravo! In past times amongst the kings before me were such men as Wen, Wu, Ch'eng, and K'ang. Steadfastly and watchfully they never failed in devotion to goodness; their glory reached to the Far West; and so it came about that alike in midland Hsia, and on the marches and frontiers, the punishments under the rule of devotion to goodness were held in awe and respect, so that, whether afar or near, at home or abroad, there was perfect goodness ...."'

Similarity, vague or marked, with traditional texts either in

16. illustrating thus a possible feature of forgery. On the basis of further photographic copies from which identical phrases and sentences are selected and classified according to script variations, numerous instances of the features found in ins. ZL.2 would appear.
respect to general literary style or to frequent use of terms and cliches cannot be regarded as reliable proof of forgery; it is, however, a feature that must in the first instance cause sufficient doubt to arise to warrant a more careful examination of the inscription concerned. The Mao Kung Ting, the Shih P'ei Kuei, the Ta Yu Ting, etc. exhibit inconstancy and are thus definitely classifiable as fakes, but the fact that the present text and these inscriptions contain so much Chou time lore is not in itself adequate reason to believe that other inscriptions of similar compilation, although apparently lacking acceptable proof of forgery, are necessarily spurious. From a general point of view, however, such inscriptions should be considered with caution and exhaustively examined. Inscriptions of this type and content are usually long and if faked, should present in most cases, definite evidence of the fact. The Tsin Hou P'an offers a whole array of evidence which is conveniently summarised by Jung Keng (Shang chou yi ch'i i t'ung k'ao, pp. 206-209); it is mainly concerned with textual criticism based on comparisons of names and events in the inscription with those recorded in the traditional texts, the two studies he quotes list the following points:

(1) the use of for 正 in the term 'the first month',
(2) identical phrases are incompletely copied from traditional sources; events more than a century apart are treated as contemporaneous happenings.
(3) names of places, persons, benefices, etc. are confusedly drawn from incompatible sources,
(4) meaningless phrases occur and the expression does not always accord with ancient literary style,
(5) characters are copies of the Seal scripts, the Stone Drum Texts, and the San Shih P'an inscription,
(6) the pronoun 吾 is rarely found in the bronze texts and there is no occurrence of the form 道 which is obviously copied from the Stone Drum Texts,
(7) the particle 道 is employed in the sense of 乃 'your' which is quite contrary to its function in other inscriptions,
(8) the character 非 is drawn in a form used only since T'ang times, 彼
(9) the modern characters 不 and 不 always appear as 不 in each case in the bronze texts, and are never differentiated as in the present inscription,
(10) towards the end of the San Shih P'an the archaic character for modern 农 appears and up to the date of 'discovery' of the Tsin Hou P'an was incorrectly transcribed as 雨, and interpreted as a vessel-name. Items 6-10 are additional observations made by Jung Keng himself. In Section One no mention was made of the 'criteria' above as they have never been applied to other inscriptions and the present text is in the nature of a special case. The pronoun 予, for instance, occurs in the Mao Kung Ting and the Shih P'ei Kuei, but it is studiously
interpreted otherwise although the sentence shows clearly enough that it was originally intended as the pronoun; the three inscriptions contain the only cases of 唸 in the bronze literature.

Ch'en Chieh-ch'i has described the practice of engraving genuine bronzes lacking inscriptions with faked texts, and several examples of these are illustrated in Shang Ch'eng-tso's article on forgery referred to earlier (p. 18); ins. 131.2 reproduced on page 265 of his article originally contained 9 characters - the first five of line 6 and the first four of line 7 - the remaining 122 characters were engraved into the vessel so as to include the original group. Minor cases of inconstancy may be noted and a few characters are written incorrectly. On the whole, however, the job was done with a fair degree of skill. Of particular importance is the presence of meaningless groups of characters, e.g., line 6: 乍廟祀般皇考 and line 9: 省名析首首. Several of the phrases and sentences may be easily traced to earlier known inscriptions illustrated on p. 268 (ins. 10.11 and 17.8) were likewise lengthened; ins. 10.11 originally comprised four characters (lines 1 and 2), while ins. 17.8 had only one character, , in the second line. The second character of the first line, , is employed as a verb; it appears in S.38.2 as a compound verb, 降 , followed by the particle 于 in a group of characters defying interpretation; this compound is
found also in ins. 109.1 in the sentence, 'the Tso-ch'e Nieh-ling offered a sacrifice to Wang Chiang (viz. the King's Consort)'. Ins. 11.4 has an unusual combination of 易 貝 which is meaningless. Ins. 10.4 appears with the character as a proper name which is usual in most other occurrences. The present inscription employs the character in a context quite unsuited to its meaning of a type of sacrifice (see Kuo Mo-jo, Yin chou ta'ing t'ung chi ming wen yen chiu, p. 24 ff. for study of the character). The Jen-Fang comprised a territory often at war with the Shang Kingdom (cf. Chu Fang-P'u's Chia ku hsueh shang shih pien, 5/3a), thus 'the King sacrificed ( 謂 ) the Jen-Fang ...' is a combination quite incompatible with the normal use of this character. In the Chun ku Catalogue appears the inscription from which ins. 17.8 was copied: ins. 18.9 (2,2/86a); the first line was completely transposed, the first three characters of line 2 were omitted and in their place the original character 則 appears followed by a badly drawn 亱 (?), while the remainder of ins. 18.9 completes the text. Thus the second line becomes a meaningless combination of 'T'ien \* myriad (?) \* Tso-ch'e cowries' which in ins. 18.9 read as ' ... The King awarded the Tso-ch'e X cowries.' Variations in the character structures and shapes are interesting; 易 becomes 賢 (i.e. modern 至); 16. It is confirmed as a place-name in the recently excavated bronze inscription, 127.1, discussed in the next Section; in the oracle bones it usually appears with the sense of a sacrifice.
becomes \( \mathcal{H}_5 \); \( \mathcal{H}_5 \) becomes \( \mathcal{H}_5 \); examples such as these illustrate well the limitation of the forger's knowledge of archaic script. Although he had some idea of the subject it is obvious that he was unaware of the errors noted above, particularly in the cases of the two \( \mathcal{T} \) elements. His interpretation of \( \mathcal{T} \) as \( \mathcal{W} \) is, of course, based on Wu Shih-fen's modern character rendering. That he had compiled a meaningless sentence in line 2 probably escaped his attention altogether, although it must be considered possible that he may have intentionally allowed it to appear 'difficult' to interpret - thus presenting a greater aroma of authenticity.

Ins. 67.5 illustrates a muddling of phrases of a particularly blatant kind - the date reads, 'In the King's second month, the third quarter, the first quarter, the day being wu-wu ...'; as Shang Chi'eng-tso correctly points out (p. 250), two month-quarters cannot be employed in this way. The inscription is copied, for the most part, from one of the Wu Wei texts (ins. 23.1), but sentences from other sources are also incorporated. The forger was careful to copy the combined \( \mathcal{A} \) (\( \mathcal{A} \)) as separate characters and to alter the name of the investee, the text of the King's command, and the list of benefices. With the exception of the month-quarter error, the text reads smoothly, and from the point of view of the context manifests little other definite evidence of fraudulence. Slight cases of inconstancy and several erratically written characters
may be observed.

Ins. 21.21 is a similar case of careless compilation; the characters read:

1. Shih-X-Fu entered
2. the Ting Ancestral Temple. Commanded, commanded the Son of Heaven
3. illustrious . extol . made (this) precious
4. K'uang-vessel, to be employed in sacrifice. May (he for)
5. a myriad years forever value (it).

The forger was, no doubt, a Chinese, yet he succeeded admirably in composing a text that cannot make sense even in this highly flexible language.

Other inscriptions classed as fakes by Shang are incorporated in Table 6 later. As far as it is possible to judge from his article, most of the spurious texts reproduced are ones engraved later in the vessels concerned, thus personal inspection of the text area would possibly result in recognition of the fraud without recourse to other evidence. What forgers will achieve in the engraving in metal will appear also in texts they cast with the vessels. A cast inscription is, contrary to the opinions of Ch'en Chieh-ch'i and others, a much easier undertaking if the fact of fraudulence is to be hidden, than is the case of engraved texts. In the first place, the medium of
writing' is less difficult to handle - the model being constructed from wax or clay is not only easier to engrave but also errors that may occur can be corrected before the mould is made. Secondly, once the vessel is cast, aging of the surface by artificial means, and the later polishing with wax, covers many minor defects that might otherwise cause suspicion.

Engraved texts are rarely found amongst vessels 'discovered' since the closing decades of the 19th century - this is probably due to Ch'en Chish-ch'i's efforts in publicising the characteristics of this aspect of forgery. As no further attempts were made to deal with forgery until the late 1920's, fakers continued their activities with greater care and produced mainly cast texts. They certainly cast faked inscribed vessels throughout the Ch'ing period, numbers of which found their way into Juan Yüan's famous catalogue. Jung Keng considers

Juan Yüan has, however, recorded that engraved inscriptions were current in contemporary collections; he himself possessed a bell (Chi ku Catalogue, 3/19a-b) whose text was engraved after casting; he did not, of course doubt such inscriptions, and in his commentary following the text of this bell exhibits current attitudes: 'In his commentary on the K'ao kung chi (section of the Chou li) Cheng states: "the inscription was engraved." In his annotation of this Chia states: "the engraving (of the inscription) rightly refers to the engraving of the vessel-model; not on to the vessel (after it is casted)." However, although an examination of the inscriptions on ancient vessels shows that cast inscriptions are certainly numerous, nevertheless there are occasionally cases of engraved texts. The archaic script on this bell was engraved after the casting was completed.'

It is our opinion that a comparatively large number of the inscriptions reproduced in his catalogue were engraved texts; those that are obviously copies of Sung Catalogue inscriptions often create this impression.
54 of the inscriptions listed to be spurious amongst which 20 are copies of Sung Catalogue inscriptions. Two of the latter are of special interest: ins. S.7.1 (Chi ku Catalogue, 5/7a) which appears within a 'Ya' symbol with the characters reversed mirror-fashion; the characters and are written erratically. Ins. S120.1 - a fourth copy (see p.261) which is barely recognisable because of the extremely badly written characters, (Chi ku Catalogue 4/4lb). A few comments are particularly necessary here regarding Juan Yuan's ability to deal with archaeological documents, and his notes on ins. S.120.1 show quite convincingly that his knowledge of the physical aspect of the documents has been exceedingly over-rated. The Yi Hai Ting, as he calls it, although containing so roughly executed a text, is obviously a copy of the Tsin Chiang Ting as may be ascertained after a few seconds' comparison; he suggests, however, that the script may be a form of 'grass' character, and he merely notes a few transcribable characters in lines, 1, 8, and 9, (which instantly show that it is a copy of ins. S.120.1). Even at that time it would be expected that an expert of Juan Yuan's standing and experience would have, at least, recognised this inscription; however, it is perhaps not so remarkable a matter when we observe three archaic style inscriptions originally manufactured in Sung times with Sung period contents, regarded by this authority as Chou period artifacts (Chi ku Catalogue, pp. 5/4b, 7/14b, 7/15a)! It seems surprising that only
a mere 50 or so forgeries have so far been found in his cata-
logue. The number of forgeries that received not only his
acceptance, but also were accepted by various private collectors
who sent him rubbings of their inscribed pieces, must have been
considerable. There was no archaeological excavation undertaken
and if we assume that accidental discoveries of archaic vessels
and grave-robbery were in progress, we must also assume that
the proportion of inscribed objects to uninscribed could hardly
have been greater than that obtaining in the extensive controlled
evacuations of the last 4-5 years. On the basis of such a
comparison it would be remarkable if more than a score or two
inscribed vessels were discovered containing inscriptions of
notable length in the late 18th century. Jung Keng's criteria
have succeeded in weeding out the most obvious cases - the job
is still incomplete.

In a catalogue of bronzes belonging to C. T. Loo and Com-
pany entitled Bronzes Antiques de la Chine is reproduced a
remarkable bell with a long inscription of 260 characters, Kuo
Mo-jo quotes the catalogue in his Liang chou chin wen tz'u ta
hsi (1932 modern character edition), and also in his T'u lu
Catalogue, but does not incorporate this inscription. No auth-
ority has attempted a study of it, although its contents are
certainly of immense importance if a genuine article; no one
has apparently accepted it or condemned it. Complete silence
such as this is surely suggestive of doubt, for no scholar would
place aside so long and valuable a text if he felt it were genuine. We assume therefore that the inscription is either suspect or classed in the minds of recent scholars as a fake. We possess a rubbing of an identical bell with the same inscription, but with slight alterations in cases of a few characters: the ancestor's name in the Loo bell is 棠隼公; in the rubbing it is 棠鳴中 (line 2); 樟 is written as 樟 and as 樟; 郅 as 樟 and as 樟; 兄 (?) as 樟 and as 樟; other examples may be discovered upon closer inspection of character variations from one vessel to the other. In both inscriptions are examples of characters reversed mirror-fashion: 樟 (line 1); 樟 (line 1); one is written upside down: 樟 (line 11). Seal forms such as 樟 (出); 樟 (矩); 樟 (其); 樟 (余), etc., abound together with characters copied from the San Shih P'An and other sources. Meaningless groups of characters appear of which the most obvious examples are located in lines 9 and 10; slight cases of inconstancy and erratically written characters are also evident. The two bells were, no doubt, produced by the same forgers who evidently altered one or two sections of the text on the second vessel model in order to give the impression that they were made by two different people. The bells themselves, however, give the show away: 12 bosses are constructed on each section of the tone chamber, a feature contrary to all known examples. The rule is that groups of
9 bosses only appear on bells.

Forgery of Shang and Chou period documents is not limited to bronze inscriptions; oracle bone texts have been produced in immense quantities by the simple process of engraving pseudo-Shang texts on genuine blank bone. Several illustrations of the earliest fakes (collected between 1900 and 1910) appear in articles by L. C. Hopkins in the J.R.A.S. volumes referred to a few pages back (e.g., Plates II b and V b, J.R.A.S., 1911; Plate III, J.R.A.S., 1912, opp. p. 1027), which are easily determined upon inspection of physical characteristics of the character stroke grooves even in the reproduced photographs. We refer to these illustrations for they show clearly the broken edges along each side of the stroke grooves which are the natural result of carving the brittle ancient bone; there can be little doubt when one peruses the Couling-Chalfant Collection of Inscribed Oracle Bone that Chalfant was indeed duped on a relatively large scale - he wrote in 1910:

'My good wife and certain colleagues guy me about the business, and mockingly declare that there is a bone-factory in Weihsen city! I smile a grim smile, and am unmoved by this raillery.' (as quoted by W. P. Yetts in his Introduction (p. XIX) to Hopkins' The Six Scripts).

The truth of the jest is borne out not only by the materials themselves, but also by the reliable account of one such factory in the same city recorded earlier (p. 68). A careful study of
spurious inscribed bones in collections assembled at this time would result in valuable knowledge of the art of forgery which might profitably be applied in weeding out fakes from the vast array of unattested Shang documents reproduced in numerous catalogues since the publication of the T'ieh yün t'sang kuei in 1904. The student in this field has a comparatively easy task for he can consult many thousands of thoroughly attested documents; not all cases of fraudulence will be found readily determinable, however, for fakers often copy genuine texts in whole and if carefully engraved the deception may not be discovered without access to the actual bones. Some oracle bone texts are instantly assessable as fakes; in our collection are two unpublished rubbings that illustrate the minimum standard attained by forgers in this field. One is taken from a large 'mammoth' bone covered with hundreds of characters, many of which are correct Shang forms but few of the 'sentences' result in meaning; the other is taken from an antler covered with many scores of beautifully executed Shang-like characters which, however, are discovered on close inspection to be excerpts copied confusedly from the Ta Yu Ting inscription! H. G. Creel has well summarised the situation of the reliability of oracle bone texts in the first decades following their discovery:

'The carving of forged inscriptions on oracle bones undoubtedly began very early. One often hears it said that "They were bought
These inscriptions have not previously been studied and only one has been published. Several scholars to whom we showed photographs of the rubbings readily stated that the documents could not be genuine. Discrepancies in the text such as illustrated in Fig. 27 following formed the basis of their opinions.
very early before they began making fakes."
But a little consideration of the circumstances
will show the absurdity of this. In the first
place, the subsequent excavation of the National
Research Institute have shown that about ninety
per cent of the pieces of genuine ancient divina-
tion bone found have no characters. These then
provide the forger with unlimited ancient raw
material on which to work. And in the early
years there was a good demand at very high prices,
with a small supply, since large scale digging
for them had not yet flooded the market. Add to
that the fact that since nobody could read the
inscriptions, nobody could very well be sure
what was genuine and what was not, and one
has a faker's paradise.' (Studies in Early
Chinese Culture, pp. 2-3).

The same impression must result when the circumstances accom-
panying the 'discoveries' of inscribed bronzes in Sung, early
Ch'ing, and late Ch'ing times, are carefully considered; there
is essentially only one aspect that differs - in no period,
until very recent times, were the 'discoveries' accompanied or
followed by archaeological excavation. Until the 1920's at
least, bronze forgers have lived in a veritable 'faker's para-
dise'.

In the Naito Collection of rubbings appears a series of
pottery fragments containing particularly well executed Western
Chou style inscriptions; each rubbing is stamped with the seal
of Ch'en Chieh-ch'i, and presumably the originals were once his
property. The whole group of 29 inscribed fragments are
spurious but present, nevertheless, valuable information on the
practice of forgery. They are obviously the products of one
| 萬 | 皇 | 用 | 用 |
| 納 | 萬 | 用 | 用 |
| 任 | 年 | 用 | 年 |
| 鼎 | 炎 | 鼎 | 鼎 |

**Fig. 27.** Character variations in Ch'en Chieh-ch'i's pottery inscriptions.
'firm' exhibiting as they do a certain identity of writing and execution of the script. Amongst the various fragments, however, several identical characters differ markedly in shapes and structures; the selection of variations opposite illustrates a feature commonly found amongst lists of identical characters taken from the general corpus of bronze inscriptions. It is closely related to the concept of constancy of structures and the 'criterion' of erratically written characters - the same character in different inscriptions should be written on the same structural principles. Where the structure deviates, inconstancy and (as a consequence) erratically written characters result. In the next Section this matter is discussed in some detail for attested inscriptions suggest strongly that constancy should prevail even throughout separate documents.

Forgery of the archaic script is thus not limited to the inscribing of bronzes, and appears in document-types of various kinds; the same suspect features are evident no matter whether the inscription is engraved or cast, or whether it is executed in clay, metal, or bone. The quality of the spurious texts varies considerably both in the script and in the composition. The forger may be extremely clever and produce inscribed vessels whose inscriptions will pass the scrutiny of the best experts, or he may not take the least interest in hiding his ignorance and manufacture inscriptions whose fraudulence is immediately
Fig. 28. Examples of some of the poorest efforts of forgers. Compare \(30.17\) with \(T.35.1\); \(5.20\) and \(5.21\) are neither archaic nor Chinese; Jung Keng quite correctly classes \(T.4.12\) as a fake. Neither \(15.17\) nor \(18.17\) have been studied by Chinese scholars but are reproduced in the 'best repositories'.

evident. Between these two extremes various grades of achievement may be noted. Examples of the worst efforts in forgers' products are illustrated opposite - some of the inscriptions are neither archaic nor Chinese! Ins. 27.11, referred to on p. ix of the Introduction, is a copy of approximately one quarter of ins. T.104.3 (v.b.) with the first 3-4 characters in each of the five lines copied omitted; the inscription is a cast text and appears perfectly 'normal' in this respect. The mode of compilation in this case is in much the same class as that of other spurious examples wherein the forger has not been especially interested in the 'correct' composition of his text.

In the following Table, 38 inscriptions accepted as fakes by various eminent scholars (two only are merely suspected) are analysed for suspect features. Other than a considerable number of spurious copies of earlier existing inscriptions determined as fakes by Wang Kuo-wei and Jung Keng, the inscriptions comprising this Table are, as far as we are aware, the only forgeries accepted by previous scholars which are not copies of earlier known texts. There are cases of several very short inscriptions which are omitted because they exhibit only one or two suspect items; altogether, Chinese and Western scholars have been able to find fewer than 50 inscriptions (original compilations as opposed to copies) which they consider to be spurious. The limitation of their research, based upon an opinion that forgers copy rather than create, is fully
illustrated by so small a number of cases; the majority of the inscriptions so determined contain fewer than a score of characters.

A second Table (No. 6(b)) contains a selection of examples of spurious copies which exhibit further suspect features over and above those in the originals and also examples of improvements that occur in some faked copies. Generally, however, spurious copies tend to reflect the same features of the original inscriptions.

Upon comparison with the Tables of Analyses in the two preceding Sections a consistency of 'forgery-error' will be observed throughout the three groups of inscriptions - each assembled upon a different basis of determination of fraudulence. It remains now to examine the nature of fully attested documents to discover the value of the features so far analysed as possible criteria of forgery. We must repeat, however, that the items discussed from Section Three to the present will require further consideration as new materials become available, and that the features called 'suspect' are not yet justifiably to be termed criteria of forgery.
(a) Analysis of Accepted Forgeries.
(b) Analysis of Spurious Copies.

The number of original inscriptions (i.e., those that are not faked copies of pre-existing texts) determined as forgeries is very small; the Table comprises all the examples we have been able to find, and is considerably augmented by the pottery inscriptions which have not previously been studied. It will be observed that few cases of inconstancy appear amongst the group - the feature has never caused previous scholars to question the inscriptions.

Forged copies of earlier known inscriptions have been found in comparatively large numbers by recent scholars; the second section of the Table comprises a selection of examples of longer texts amongst which a few are regarded as forgeries by others. The many short inscriptions have been omitted here as they are unsuitable to illustrate more than one or two suspect features (they are included in the Major Table). It will be noted that faked copies sometimes appear as improvements on the originals, e.g. S.110.2 and S.101.1; generally, however, forgers tend to incorporate more and more of the features we suspect as they produce greater numbers of copies. The last group (T.99.1) of vessel-lid sets exhibits an interesting development where the clearer vessel-text (T.98.1(v.a.)) was copied for both inscriptions of the second set, while the lid-text of this became the prototype of the third set.
### TABLE NO. 6(a)

**Analysis of Accepted Forgeries**

<table>
<thead>
<tr>
<th>No.</th>
<th>Time</th>
<th>Source</th>
<th>Forgeries</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>538.1</td>
<td>B E J L M</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>260.1</td>
<td>A B d E F G I J K L M</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>131.2</td>
<td>B E F K M O</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>112.1</td>
<td>B E J K M</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>110.3</td>
<td>A E J K M</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>78.1</td>
<td>B E G K M O</td>
<td>S1, 3</td>
</tr>
<tr>
<td>7.</td>
<td>67.5</td>
<td>B E G (obscure text)</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>67.3</td>
<td>F J K</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>53.4</td>
<td>E F G J K</td>
<td>S1</td>
</tr>
<tr>
<td>10.</td>
<td>49.4</td>
<td>B D E J K M N O</td>
<td>S1</td>
</tr>
<tr>
<td>11.</td>
<td>45.1</td>
<td>E M</td>
<td>S1</td>
</tr>
<tr>
<td>12.</td>
<td>37.8</td>
<td>E K M</td>
<td>S1</td>
</tr>
<tr>
<td>13.</td>
<td>29.8</td>
<td>E J K</td>
<td>S1</td>
</tr>
<tr>
<td>14.</td>
<td>28.8</td>
<td>E J K</td>
<td>S1</td>
</tr>
<tr>
<td>15.</td>
<td>27.11</td>
<td>E G N</td>
<td>W3</td>
</tr>
<tr>
<td>16.</td>
<td>21.24</td>
<td>E J K M</td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>19.9</td>
<td>E J K M</td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>19.8</td>
<td>b E E J K M</td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>18.16</td>
<td>E F G K</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>18.1</td>
<td>E I M O S2</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>17.10</td>
<td>E J K M O P U</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>17.8</td>
<td>E J K M</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>16.14</td>
<td>A E K N</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>15.10</td>
<td>E F G J K M</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>15.8</td>
<td>E F G</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>14.22</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>14.16</td>
<td>E M</td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>12.25</td>
<td>E G K M Q</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>12.24</td>
<td>E J K M</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>12.17</td>
<td>E G J K N</td>
<td>W2</td>
</tr>
<tr>
<td>31.</td>
<td>11.6</td>
<td>E G J K M N</td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>11.5</td>
<td>E J K M N</td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>10.11</td>
<td>E J K</td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>10.5</td>
<td>b F K</td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>7.22</td>
<td>E N U</td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>7.21</td>
<td>E F G</td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>7.20</td>
<td>E G</td>
<td></td>
</tr>
<tr>
<td>38.</td>
<td>6.12</td>
<td>F G</td>
<td></td>
</tr>
</tbody>
</table>
TABLE No. 6 (b)

Analysis of Spurious Copies

<p>| | | | | | | | | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>S.120.1 (v.a)</td>
<td>A</td>
<td>b</td>
<td>D</td>
<td>F</td>
<td>J*K</td>
<td>M</td>
<td>Q</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>S.120.1 (v.b)</td>
<td>A</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>J*K</td>
<td>M</td>
<td>Q</td>
<td></td>
<td></td>
<td>U</td>
<td>X</td>
</tr>
<tr>
<td></td>
<td>S.120.1 (v.c)</td>
<td>A</td>
<td>B</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>I</td>
<td>J*K</td>
<td>M</td>
<td>Q</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>S.110.2 (v.a)</td>
<td>a</td>
<td>B</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td></td>
<td>S</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>S.110.2 (v.b)</td>
<td>b</td>
<td></td>
<td>F</td>
<td>G</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>N</td>
<td></td>
<td>S</td>
<td>L</td>
<td>U</td>
</tr>
<tr>
<td></td>
<td>S.110.2 (v.c)</td>
<td></td>
<td></td>
<td></td>
<td>F</td>
<td>G</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>N</td>
<td></td>
<td>S</td>
<td>L</td>
</tr>
<tr>
<td>3.</td>
<td>S.104.1 (v.a)</td>
<td>A</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td></td>
<td>S</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>S.104.1 (v.b)</td>
<td>A</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td></td>
<td>S</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>S.104.1 (v.c)</td>
<td>A</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td></td>
<td>S</td>
<td>L</td>
</tr>
<tr>
<td>4.</td>
<td>S.100.2 (v.a)</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td>N</td>
<td></td>
<td>S</td>
<td>L</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>T.101.2 (v.b)</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td></td>
<td>N</td>
<td></td>
<td>S</td>
<td>L</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T.101.2 (v.c)</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>G</td>
<td></td>
<td></td>
<td>N</td>
<td></td>
<td>S</td>
<td>L</td>
<td>U</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T.101.2 (v.d)</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td></td>
<td>N</td>
<td>P</td>
<td></td>
<td>S</td>
<td>L</td>
<td>U</td>
</tr>
<tr>
<td>5.</td>
<td>T. 84.1 (v.a)</td>
<td>A</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td>J</td>
<td>K</td>
<td>M</td>
<td></td>
<td>Q</td>
<td>S</td>
</tr>
<tr>
<td></td>
<td>T. 84.1 (v.b)</td>
<td>A</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>P</td>
<td>Q</td>
</tr>
<tr>
<td></td>
<td>T. 84.1 (v.c)</td>
<td>A</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td></td>
<td></td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>P</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>T. 80.1 (v.a)</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td>N</td>
<td></td>
<td>S</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>T. 80.1 (v.b)</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td>S</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T. 80.1 (v.c)</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>M</td>
<td></td>
<td>S</td>
<td>L</td>
<td></td>
</tr>
<tr>
<td></td>
<td>T. 80.1 (v.d)</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>M</td>
<td>N</td>
<td>S</td>
<td>L</td>
</tr>
<tr>
<td></td>
<td>T. 80.1 (v.e)</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td></td>
<td></td>
<td></td>
<td>K</td>
<td>M</td>
<td>O</td>
<td>S</td>
<td>L</td>
</tr>
</tbody>
</table>
SECTION SIX.

Fully Attested Bronze Inscriptions.

From the point of view of the survey generally - the extent and nature of forgery amongst Western Chou style inscriptions - there is little to remark upon in the present Section. The fully attested and acceptably attested inscriptions exhibit practically none of the suspect features tabulated and discussed in the preceding pages. They offer thus negative evidence, which in the circumstances, may be accepted as a highly significant control. In some respects the conclusions arrived at in this paper may seem to be based to too large an extent on negative evidence which in itself may often justifiably be regarded as 'no evidence' at all; it should be clear to the reader, however, that although observations of a negative kind permeate the study, their validity is always supported by either (a) statistical fact or (b) the characteristics of indubitably authentic material as contrasted with those of unattested material. Inconstancy, for instance, is unknown in authentic Shang and Chou period writing - fully attested documents prove this fact in nearly every individual inscription. The very numbers available are sufficient to present evidence that can only be interpreted positively - inconstancy is a feature alien to archaic
writing as it was practised in a variety of document types over a period of a millennium. Where it occurs in the general body of inscriptions it must be characteristic of a later period. On the basis of such reasoning and our general experience in the study of the archaic inscriptions, we have asserted that inconstancy is definite proof of forgery. As to the suspect features analysed in the preceding Sections, however, we make no such definite assertion, for the controls available are still meagre although we believe them to be significant. The aim is primarily to tabulate these features for later assessment as to their validity as criteria of forgery. Amongst the inscriptions in the present Section suspect items R ('review merits' phrase) and S (month quarter) appear; as far as the archaic script is concerned items F (mirror-reversed characters) and G (incompletely written characters) are found in a few short bronze texts. The significance of each item will be discussed in its appropriate place.

As the inscriptions are all genuine documents it is necessary to examine them in much the same way as the accepted forgeries were treated in the last Section - the study, therefore, will be that of a somewhat detailed investigation of the nature of the attested inscriptions: what general features do they exhibit, what was the actual nature of the archaic script, how did the ancients express themselves, what matters
are related in the documents? In considering such characteristics we take the opportunity of progressing, in a tentative manner, a step further and attempt to assess the import of the inscriptions as historical sources. Obviously there is little justification to examine doubtful or spurious texts from this aspect. It will be observed, no doubt, that our attitude towards the present group of inscriptions differs considerably from that in the earlier Sections. For various reasons we have regarded the unattested materials with considerable suspicion and have not permitted them to influence our interpretation of what should be characteristic of a genuine document. The discipline has resulted in the discovery of the principle of constancy and a number of other items that may be of similar significance; it must, we believe, continue to guide research in this field, and it would be most unwise to relax our attitude and approach even in respect to the authentic documents when examining them for an historical purpose. Thus precedence is given them from whatever aspect they may be studied.

Text-types that may be paralleled with the attested inscriptions are sought in a few cases amongst the unattested body, but such comparison that is made may not be considered

---

1. Even as far as translation is concerned, the literal style employed earlier is applied here. There is a marked difference, however, in the impression gained by the translator; the text-types, for the most part, have little in common with the
reliable proof of the authenticity of the unattested documents; it merely suggests the strong possibility that they are authentic or failing this, that they are copies of, or compilations based on, genuine inscriptions. Should such texts be employed in historical research, it should be made fully evident that they are unattested sources.

1. ins. 23.9 The X Yi.
   1. When the Duke .... (=verb?) in Tsung Chou,
   2. X followed the Duke .... (=verb) .... -Lo
   3. at Z. (The Duke) awarded X cowries.
   Therefore (X)
   4. made for Fu-Yi (this) precious and honoured Yi-vessel.

This is the longest text amongst a number of inscribed bronze artifacts excavated under scientific conditions at Hsin Hsien in 1936; illustrations of the inscriptions are appended opposite. Four characters are not understood, but their function in the text is readily ascertainable: the third character in line 1 is a verb and although there is a

1. unattested bronze documents, the vocabulary is no longer of the restricted kind with which he has had to work, the texts read smoothly and any barriers met in translation are due to ignorance of the meanings of certain characters, not to the literary style of the text.

2. For full account see T'ien ye k'ao ku pao kao, 1936.
slight possibility that it may be a proper name (c.f. ins. 40.2, 公東, which some commentators regard as a title-name combination), we concur with Yang Shu-ta (Chi wei chu, p. 165) that it can hardly be so interpreted. Characters 4 and 5 in line 2 are similarly entirely new archaic graphs; the first is without doubt a verb, in fact the two characters may form a compound verb. 'Lo' is a geographical name while the second character of line 3 is almost certainly another geographical name (Yang suggests it is modern 官, p. 163, but does not regard it as a place-name; he also suggests 洛 to be a loan for 夥 'arrive', but in view of the numerous examples of the usage of both characters in the inscriptions, this cannot be taken seriously). When later excavated inscriptions with the above characters appear, it will be possible to discover, with reasonable luck, the meaning of this sentence. From our knowledge of the inscriptions generally we would expect one of the following meanings to result, or something similar:

(a) X followed the Duke in .... -ing the Lo (river?) at Z.

(b) X followed the Duke in .... -ing the Y (and) Lo (districts?) in Z.

Reference to the omission of the element ¥ in the second occurrence of the investee's name has already been
made (p. 21). Yang transcribes 㠵 as 亼 thus cautiously avoiding a definite statement as to whether the element 亼 (modern 亼) is present or not - it is just discernable in one of the reproduced rubbings in our collection. The cowrie element in 'precious' appears with only one inner stroke as contrasted with two in the character 玉, line 4; there is a faint suggestion of a second stroke in the two different rubbings consulted, but because of the uncertainty all similar cases noted in the unattested inscriptions (where the 'cowrie' element and the 'cowrie' character only exhibit this minor feature of inconstancy) are denoted by the code letter 'b'. We tentatively regard it as a minor exception of the same type and insignificance as the few rare cases observed in the Shang oracle bone texts (see p. 110).

Ins. 23.9 confirms the authenticity of the following inscription text-types: 32.3, 31.1, 25.1, 24.12, T.23.12, T.23.2, 21.2, 21.2, 20.12, 20.10, T.20.4, 20.2, 19.5, T.19.4; they are not necessarily all genuine inscriptions but each is strongly reminiscent of the attested example. As an historical source, ins. 23.9 confirms the place-name Tsung Chou; the nature of the 'feudal' relationship - service and award; the employment of cowries as articles of benefice; the title of Duke; the dedication of the record and vessel in which it is inscribed to a deceased forbear.
When the nature of the service is deciphered the document may obtain greater historical value.

2. ins. 127.1  

The Yi Hou Nieh Yi.

1. In the fourth month, the day being ting-wei, .... .... Wu Wang.

2. Ch'eng Wang attacked the Shang frontiers and then inspected the Eastern States' frontiers.

3. The King (i.e. Ch'eng Wang) stood (i.e. took his position in readiness for the ceremony) in the Ancestral Temple (?) of Yi, facing the south. The King commanded

4. the Marquis of Ch'ien, Nieh, saying: "Be Marquis of Yi." Awarded (Nieh) .... (place-name?)

3. It is well to note even the most trivial details when reviewing the attested inscriptions, and each item must be carefully considered in relation to similar items in the unattested texts. Only thus shall we be able to discover amongst them possibly authentic documents that may be relatively freely used for historical research. As greater numbers of attested inscriptions become available it is to be expected that the practice of working from 'the known to the unknown' will become a major line of research supplementing current studies of the newly excavated inscriptions. In this Section it is not possible to present detailed illustration of this method of research in individual cases; in later papers studies of each of the inscriptions noted in the following pages will be dealt with in considerable detail with the major aim of determining what unattested inscriptions may be genuine or possibly trustworthy materials upon comparison with the authentic examples.
5. aromatic spirits - one flask; Shang boiler - one item; red (?) bow - one; (red) arrows - one hundred;
6. black bows - ten; black arrows - one thousand.
   Awarded (Nieh), land, chuan-areas -
7. two hundred; ..., (quantity) - one hundred and twenty; ..., towns - thirty-
8. five; ..., one hundred and (forty?) ....
   Awarded (Nieh), (resident) in Yi,
   Awarded (Nieh) Cheng(?) .... knights (?);
10. .... .... .... (?) hundred and fifty persons. Awarded (Nieh) Yi serfs
11. six hundred and sixteen persons. The Marquis of Yi, Nieh, extolled
12. the King's grace and made (for his deceased father) Ch'ien Kung (i.e. Duke of Ch'ien;
   with the sacrificial name of ) Fu-Ting
   (this) honoured Yi-vessel.

In June 1954, a four-handled Kuei-vessel containing the above inscription, together with a number of other bronzes,
was found by a peasant under a few inches of soil on the southern slopes of Yen-tun-shan, Tan-t'u Hsien, Chiang-... The vessels (12 in all) passed into official hands within a
short time, and a full account of the matter appears in a recent issue of the *Wen wu ts'ao* *k'ao* *tz'u* *liao* (1955, 5/58). Ch'en Meng-chia and Ch'en Pang-fu each working independently forwarded transcriptions and commentaries of the inscription to the above journal which were published together in the same number (pp. 63-69); Ch'en Meng-chia incorporated the inscription in the first of his articles on 'The Chronology of Western Chou Bronzes' in the *K'ao ku hsüeh pao*, no. 9 of the same year (1955) with several modifications on his earlier transcription. In Number 11 of this bulletin (1956) Kuo Mo-jo further transcribes and comments on the inscription. Our rendering above takes into account the preceding studies.

The day-date is not clear, Ch'en Pang-fu has ting-tzu, the others ting-wei; for want of a better alternative we always render the phrase as, 'the day being ....', the exact meaning of the phrase has not yet been adequately determined. Following the date are two completely obscured characters which, if cleared, would be of considerable importance in interpreting the ensuing context; Kuo suggests they should be 'the King inspected' and continues.

---

4. It appears in the *Tso Chuan*, Ch'iao 9th year and is translated by Legge as: "If the day be Tsze-maou ...." (p. 626); commentaries discuss the significance of the date, accepting the characters as being equivalent to 壬 or 癸, but say nothing directly about this term. It is to be found in inscriptions recorded from Sung times to the present; in the majority of cases it appears in Western Chou style inscriptions.
the sense as: the King inspected the wall paintings (ï¼) of the temple depicting scenes of the attacks of the Kings Wu and Ch'eng on Shang and their inspection of the Eastern States. By this, the King mentioned in the inscription would be a successor of Ch'eng Wang; Kuo apparently regards the vessel as being datable in Ch'eng Wang's reign; however, (p. 9) Ch'ên Meng-chia offers a more suitable interpretation. He stops the sense at the end of line 1 and suggests the two obscured characters to be the name of a sacrificial ceremony; Ch'êng Wang thus becomes the living King mentioned only as 'Wang' in lines 3 and 12. We follow Ch'en's punctuation here and also agree with his interpretation of [1/3] as [1/2] - this is not, of course, loan usage but simply a case of the archaic graph [1/3] being equivalent in Chou times to modern [1/2] and possessing then the meaning of 'frontier'. Whether

5. The character [1/3] (sometimes incorrectly transcribed as [1/4], see Kuo Mo-jo, Yin chou ch'êng t'ung ch'i ming wen yen chiu, pp. 21-2) seems to require the translation of 'military inspection' in the sense of a tour of inspection with a considerable body of troops with the aim of causing recalcitrants to confirm their allegiance. It may possess a meaning even closer to [1/5] with which character it often occurs in the same inscription. Kuo's suggestion that [1/3] is one of the obscured characters does not seem acceptable either from the point of view of the present inscription context or of that of unattested inscriptions containing this character.

6. If [1/3] in the present context is 'frontier', 'border states', or something similar in meaning, the presence of the encircling element could be taken as a support for such an interpretation; in cases like this the sound of the character as it has been recorded since Han times may not be significant. It may well be a further example of the somewhat
this was actually the meaning when the inscription was compiled is not, of course, absolutely certain. The second character of line 3 is 立, here equivalent to the 即立 (i.e. 即位) of unattested inscriptions. Ch'ên is incorrect in transcribing it as 立 'to divine'; Ch'ên Pang-fu is also in error in making it 'enter'. Characters 5 and 7 in this same line seem definitely to be, respectively, 宗 and 南 (here we follow Kuo); the fourth character of line 4 is either 一日 or 召, the former seems the more acceptable; the next character is not clear. For the remainder of the text we follow Kuo with certain modifications which may be checked from the transcription appended earlier.

The inscription is one of paramount importance; it records the fact that Shang was by no means vanquished by the time of Ch'eng Wang but illustrates the growing power of the State of Chou which, probably during this King's reign or very soon after, finally succeeded in subjugating the Shang territories. The record speaks only of an 'attack' against the Shang border-states. It records the names of other allied (?) territories known as the Eastern States - the latter probably were held by Chou in an uneasy state of submission. The State of Yi was apparently one of these and was invested in the Marquis of Ch'ien together with spoil and captives

6. arbitrary measures in respect to the script effected by Li Ssu discussed after ins. 61.1 later.
obtained from the earlier attack on Shang and also prisoners of Yi and of another State, Cheng. Cheng, Yi, the Eastern States, and Chou are all mentioned in Shang oracle bones and generally appear as enemy territories, thus the present inscription is an important link between the comparatively well (primary-) documented Shang period, and the somewhat unreliable mixture of myth and fact of Western Chou which has survived the fires of Ts' in only to be indoctrinated with Confucian lore. Ch' eng Meng-chia has correctly stated that Ch' eng Wang's expeditions to the East are confirmed while the 'Regency' of Chou Kung (the Duke of Chou) described in traditional sources does not, in the face of this new evidence, appear reliable (p. 66). Not only this, the practice of the Kings of Chou of employing what has hitherto been accepted as

7. It is not absolutely certain that the context can be read in this way; the Yen-boiler is definitely called a 'Shang Yen-boiler' but the captives are not so precisely modified. The term 'in Yi' (line 8) may possibly require the interpretation of 'to reside in Yi' rather than the 'resident in Yi' in our rendering, and may thus have to do with the traditional record of the removal of the Shang people after the revolt of Wu Keng. The Chinese commentators are of the opinion that the captives were, indeed, Shangs. As the 'attack on the Shang frontier' preceded the 'inspection of the Eastern States' frontiers' it would be expected that captives and spoils from the former would play a part in gifts made after the two expeditions were successfully concluded. This seems to be as much as one might justifiably read from the context.

8. See Ma Tsung-hsiang, Chia ku ti ming t'ung chien, for locations of relevant examples.
their posthumous titles (i.e. Wen Wang, Wu Wang, Ch'eng Wang, etc.) during their lifetime, is now definitely established - the system of posthumous royal titles was instituted much later. As regards the question of posthumous titles generally, however, new light is cast in the last line of the inscription: the Marquis of Ch'ien refers to his deceased father as the Duke of Ch'ien and also as Fu-Ting; the first illustrates the custom, found even amongst small States, of granting the dignified rank of 'Duke' to deceased feudal princes; the second combination, occurring together with the first, is particularly significant. Amongst the unattested inscriptions the title-names, Fu-Chia, Fu-Yi, Fu-Ping, etc. abound and invariably are interpreted as a reference to the investee's deceased father. Although the present text does not precisely state the fact, Ch'ien-Kung-Fu-Ting can be no other than the Marquis's father and predecessor. The hereditary nature of feudal appointment is thus shown; while the

9. This was first noted by Wang Kuo-wei on the basis of ins. 51.2, T.19.e, S.71.1, and S.131.1, and the thesis was further expanded to incorporate Eastern Chou cases by Kuo Mo-jo (Chin wen ts'ung k'ao, p. 88 ff.). Several of the inscriptions cited by both authorities are to be strongly doubted as genuine materials; ins. 51.2, for instance, not only comes under this category but also lacks any mention of a King by his name (c.f. Karlgren's remarks under B.17, Yin and Chou, p. 54)! The present inscription and the next decides conclusively the fact that Western Chou Kings used during their lifetimes the names by which they have come to be known posthumously.

10. Kuo Mo-jo's study of the inconsistencies of titles amongst the feudal princes of the same States both as found
deceased forbear being recorded with both his posthumous title of 'Duke of Ch'ien' and his other title of Fu-Ting is a feature strongly suggesting that the Fu title must have a religious significance. Chou customs in this respect may not have differed greatly from those of Shang, but much research yet remains to be accomplished before the matter can be fully understood.

The Marquis of Ch'ien was, no doubt, one of a number of feudal princes who had followed and assisted King Ch'eng in the two military expeditions mentioned; on account of his services in connection with these, or possibly as a sort of down-payment for the services commanded (line 4 is not clear enough for a definite transcription), the King awarded Nieh, the Marquis of Ch'ien, a series of gifts. These ranged from

10. amongst the inscriptions and as observed between traditional accounts and the inscriptions (Chin wen ts'ung k'ao pp. 38-41) being based as it is on unattested sources will require, as will any other similar study based on the same materials, considerable reconsideration as the attested inscriptions increase. Although the present inscription may seem to offer support to Kuo's thesis - the rulers of Ch'ien being referred to as Marquis and Duke in the same document - we are of the opinion that this is to be regarded as evidence of the validity of the custom of promoting State rulers to the dignity of Duke after their death, particularly as it is the deceased ruler only who is recorded with this rank. If this opinion is correct, then the deceased ruler was also a Marquis during his lifetime - as to the status of other rulers of Ch'ien, before and after these two people, we must await the excavation of further documents. The inscription, furthermore, illustrates the early date of this custom.
This passage was written before vol. 12 of the K'ao
ku hsüeh pao arrived; the photo of the inscription area
shows that the character 乙 is definitely this char-
acter. Fig. 30, it should be noted, is a further re-
drawing made with reference to the photo - on the basis
of it some minor modifications in the following dis-
cussion will be required. Further revision of this
sort will be effected in a later paper; as far as we
can judge, there will be no fundamental alteration of
views expressed here.
land, villages, captives, and serfs to precious objects such as wine, a (bronze?) vessel, and weapons. It is unfortunate that the actual nature of the service deserving of such a large array of benefices cannot be fully deciphered; the text reads, 'The King commanded Nieh, Marquis of Ch'ien ....... .... Marquis to (in?) Yi.' We would expect one of two possible statements to appear upon a more thorough examination of this part of the original inscription:

(a) .... commanded Nieh saying: "Be Marquis in Yi."
(b) .... commanded Nieh to .... (verb) .... (proper name)- Marquis in (to?) Yi.

Ch'en Pang-fu favours the first and suggests that the character following 回 (which is itself not a definite transcription) may be equivalent in meaning to 傳 in the Shi h ching ode 300:

乃命魯公侯于東錫之山川土田附庸

'And so he appointed the prince of Lu and made him prince in the east; he gave him mountains and rivers, lands and fields and attached states' (Karlgren, B.M.F.E.A., 17/96).

The parallel is striking and we tentatively accept (a) above which seems to be further supported by the context of line 11:

'The Marquis of Yi, Nieh, extolled the King's grace.'

He is now known as the prince of the State of Yi; the record 11. The very fact that Nieh, in the early part of the text, is recorded as Marquis of Ch'ien, then in the concluding lines,
(a) 昭庚一卣：秬鬯一卣
(b) 商鼎一庀：釐彝圭瓒
(c) 纷弓一.genre:弓百：形弓一形矢百
    族弓十族矢千：虚矢一虚矢百
(d) 土车川言：□车□百又□
    □车邑世又五；□冒之□
(e) 才周王人因又七生；
    酉□白臆男□因幸夫
(f) 国庙□□人言又□六夫

Fig. 31. Benefices recorded in ins. 127.1 and a reconstruction of the text in damaged parts of the inscription area.
is thus one of a feudal investiture involving the grant of both title and territory, and nowhere amongst the inscriptions recorded to date does there appear a more informative example of the workings of ancient Chinese feudal organisation.

Amongst the benefices are items of particular interest:

(a) may be paralleled with both traditional text and un-attested bronze text examples but with one significant

11. having received gifts of captives from the State of Yi wherein the investiture was held, now calls himself 'Marquis of Yi', is sufficient information in itself to illustrate that Nieh received over and above the benefices the rulership of Yi. It may further be interpreted that the spoils obtained after the defeat of this State, as well as the State itself, became immediately the property of the King; his granting of Yi captives to the Marquis of Ch'ien, whom he has also made Marquis of the defeated State, shows that other captives, other spoils, and even possibly other sections of the Yi territory were reserved as gifts by the King for bestowal on other princes who had accompanied him on the expeditions. Nieh, himself, has received gifts from a variety of sources. These observations form an interesting commentary on the power of the early Chou monarchs and the allegiance they were able to exact from the vassal princes.

12. In dealing with historical material of this kind it is very easy to adopt Western terminology which, in some cases, may not suit the institutions of the alien culture; already we have used the titles, King, Duke, Marquis, etc., without attempting either to define or support their validity. Whether the term 'feudalism' or the many aspects of it as known to Western historians may be generally employed in studies of Shang and Chou institutions, is not a matter to be discussed in these pages at any length; the Western terms used here should be regarded only as temporary expedients which in a more extensive work would be fully defined. Reference should be made to Ch'i Ssu-ho's excellent account, 'A Comparison Between Chinese and European Feudal Institutions' (Yenching Journal of Social Studies, vol. 4, no. 1, 1948) wherein the studied use of Western terminology may be noted.
difference, namely the place-name character 國 which replaces the invariable 國 in the other sources; (b) is compared with the Shih ching 占王 by the commentators — a very doubtful pairing; (c) offers, however, a most remarkable parallel with the Shu ching (Wen Hou Chih Ming): 'one red bow and one hundred red arrows, one black bow and one hundred black arrows' (Karlgren, B.M.F.E.A., 22/80) and the similar benefices bestowed on the Marquis of Tsin (Hsi, 28th year): 'one red bow and a hundred red arrows, a black bow and a thousand black arrows' (Legge, p. 210-11). Kuo discusses at length the numbers pertaining to the grants of territory and comments on the character 川. He quotes the Chou li sentence: 万夫有川 and considers how the land-measure 川 ties up with the general context of this part of the inscription; unfortunately, however, his study is based on the misplacement of the broken fragment containing the bulk of the numbers examined as shown in his reproduced rubbing — he would have been wiser to have consulted Ch'ien Meng-chia's rubbing (Plate 8) in vol. 9 of the K'ao ku hsueh pao which has the fragment placed correctly. Our transcription is based on this and our reconstruction is, we believe,

13. It would appear that the Tso Chuan text has become slightly corrupt here in mentioning only one black bow in relation to 1000 black arrows.

a more exact one. The character 甲 is employed in line 6 in a manner unknown in earlier available bronze literature: 易土甲川二百。 'Awarded territory, (measurement) - 200.' The two characters 甲川 appear in the sense of a land-measure; in line 7 甲邑 is a similar enumerator and is similarly followed by a number, 35. The two other discernable cases of 甲 are obviously based on the same word-order principle; our reconstruction here is both logical and possible in view of the blank or obscured text areas available. The recording of quantities as shown in this inscription might be graphically expressed as:

(a) territory, 甲川 (in chüan measurements totalling) - 200.

(b) towns, 甲邑 (in totals of stockades (?)) - 35.

Unlike the enumerating of small articles or of men the enumerator precedes the number; Kuo's contention that enumerators follow the numbers in this part of the text does not seem to be tenable.

15. It should be noted that the preceding discussion is based on reconstructed portions of the inscription which have been broken and lost, while several of the remaining characters are not discernable. The conclusions as stated above are not idle speculation, but are the result of many hours' observation and thought. Although the reproduced rubbings consulted are not perfectly clear and the original is broken and incomplete, there remains sufficient evidence of the original state of the inscription to permit a reasonably reliable reconstruction of the text.

The method of comparative analysis of identical and similar sentence-types and phraseology to elucidate problems of
In the majority of inscriptions of two or more scores of characters which are concerned with accounts of the investiture ceremony, the general practice is to record various details of the ceremony together with the names of several of the persons who took part in it. Ins. T.149.1 is one of the most complete examples of this, and in the traditional literature, too, several accounts are recorded. The present text dispenses with such seemingly unnecessary detail and differs in the relevant context considerably from all previously published inscriptions; the King does not 'take his position' (catid), but 'stands in' the position he occupies for the ceremony - in the present case it is the Ancestral Temple (?) of the ex-rulers of Yi. The investee does, no doubt, 'face the north' when confronting the King, but here is the unique description of the King 'facing southwards' known in traditional literature but lacking in any earlier known bronze inscription! At the conclusion of the text the investee does not record his making obeisance nor dwell at length on cumbersome 'extol' phraseology. He merely writes 'extolled the King's grace'. This latter observation may not be significant (c.f. the 'extol' phrase in the next inscription), but the

15. the above kind is gradually being resorted to by Chinese scholars; an interesting application of it may be noted in Li Hsueh-ch'in's study of the Bamboo Tablets (Wen wu ts'an k'ao tz'u liac, 1/48-9, 1956).
Several of the Ta Yu Ting sentences enumerating 'serfs' or 'slaves' seem parallel in some respects to the similar enumerations in the present inscription. In the latest number of the K'ao ku hsueh pao (vol. 12, Plate 2 after p. 94) appears a clear reproduction of a photograph of the text area of ins. 127.1 which assists somewhat in determining the nature of the partly destroyed character preceding 亖 in line 9. The character following 'award' is transcribed by the commentators as 亖 (亖) which rendering we have followed; the archaic form 亖 is this much clear, and there appears to be two further small strokes just below the lowermost horizontal stroke thus forming a 亖 element. Two interpretations are possible: Cheng is written as 亖 or as 亖 - both forms are known in other inscriptions in the sense of the State-name. However it is also possible that the two small strokes belong to the partly destroyed character which the commentators regard as 亖 (archaic 亖). Of this character only the lower part is discernible: 亖; as it appears thus in the rubbings the commentators have a pretty definite case for regarding it as 'seven'. It may, however, be an entirely different character. The photograph suggests this in its clearer definition of the shape of the two small strokes which seem to tend very much towards a 亖 form (i.e. 亖) rather than the 亖 form which would be expected if they were part of the character 'Cheng'.

If the following character is not 'seven' it may be a further place-name coupled with Cheng; the text would then read: 'Awarded (Nieh) the Counts (?) of Cheng and X, their retainers (?) totalling .... hundred and fifty persons.' Should it be the numeral 'seven' the following reading may hold: 'Awarded (Nieh) seven Counts of Cheng and their retainers (?) totalling .... hundred and fifty persons.'

Exactly what 亖 means here is not easy to decide but as it is preceded by the place-name Cheng it must refer to persons of comparatively low rank taken as captives from this State; it will be noted in the preceding sentence that the captives 'to reside in Yi' are called 'King's men' and are enumerated as 生 'surnames', while the 'Counts' and the other persons grouped with them are merely enumerated as 夫.

It may be stated with some degree of certainty that the character 亖 has a function here which cannot be paralleled with the similar Ta Yu Ting sentences for those record first an official then the number of them followed by 亖 used as an enumerator.
'facing the south' phrase may be found representative of later discovered inscriptions - its absence amongst the unattested 'investiture ceremony' inscription types in contexts where it might be expected to appear, or where it is replaced by the 'facing the north' phrase is a feature that causes us to suspect the entire group. It is, indeed, strange that nine centuries of excavation have not resulted in the discovery of text-types that may be paralleled with this inscription. The commentators have noted certain similarities with the Ta Yu Ting and the Nieh Ling vessels; the benefices have something in common with the first and the names Nieh and Fu-Ting are found in the second. Such parallels that have been observed in the three commentaries, however, are not entirely justifiable.

3. ins. 54.1 The Chang X Yi.
1. In the third month, in the first quarter, on the day ting-hai, Mu Wang
2. was in the Lower Hsu Settlements (?). Mu Wang held a feast with new sweet spirits; Chi-
3. Ching-Po and (?) the Ta-Chu (official, Chang-X ?) shot arrows. Mu Wang acclaimed (?)

16. This opinion will be supported at length in a later paper dealing with the present inscription in detail.
4. X because of (his) attendance on (?) Chi-Ching-Po-Shih; Chi-Ching-Po-Shih drew un-
5. erringly (?). Chang-X was praised in full (?) and presumed to respond extolling the Son
6. of Heaven's great and illustrious grace. Therefore industriously made (this)
honoured Yi-vessel.

An account of the find comprising 17 bronze vessels and a number of other objects is recorded in the Wen wu ts' an k' ao
tz'u liao, vol. 2, p. 129, with which notice a reproduction of a rubbing of the above inscription together with a trans-
scription by Kuo Mo-jo appears. Of the 17 vessels, 7 contain inscriptions, one with 18 characters while 5 average 2 or 3
characters each; reproductions are not available. Li Ya-neng has published a fairly detailed commentary on the text (K'i a k
ku hsueh pao, 9/177-81) which has assisted in the above translation.

The general meaning of the inscription is easily assessed: during the visit of King Mu to Hsia Hsu, a feast followed by
an archery contest was held; Chang-X, who was connected with Chi-Ching-Po in these activities, conducted himself well and
received the praise of the King. To commemorate the occasion he cast the inscribed vessel. This much is clear, but in
details there are difficulties which cannot be solved
without the aid of further attested texts containing some of
the same characters and phrases. The character 亝, which
is considered to be modern 亝 in the sense of 'dwelling' or
'settlement', is known in unattested examples and in similar
context (e.g., ins. S. 100, 1); the term 'feast with new sweet
spirits' is found in several inscriptions and has been per­
etuated in the traditional texts (Tso Chuan, Chuang 18th year);
the official rank of Ta Chu is described in the Chou li. Such
matters are comparatively easily dealt with; however, the
'review merits' phrase, the character 麓, the character 後,
and the character 亝, can only be considered tentatively
at present.

Ching ( 亝 ) is a State-name well known in the oracle
bones as well as in unattested bronze texts; we believe 麓 also is a State-name, although the only reliable support in
this direction is its occurrence as a personal name of Shang
period diviners. Li Ya-neng suggests it to be equivalent to
就 'to come to' as in the Shih ching, ode 58: 來卿我
謀 'You came to make proposals to me', but this does not
seem to suit both occurrences; in line 4, the characters Ching-
Po-Shih are each accompanied by repetition marks; the preceding

17. We interpret the rank as that held by the investee, Chang-
X; it may, however, be a further title held by Chi-Ching-Po.
Whichever way we interpret this matter it will not greatly
affect the later sections of the inscription in their general
meaning.
character Chi is heavily patinated where a repetition mark would be placed, but there is a suggestion of a portion of such a mark in the rubbing - if this area could be further cleaned and its presence or absence definitely determined, the validity of our interpretation of it as a State-name will be immediately assessable. Ins. 127,1 illustrates the fact that a single prince may be ruler of two States, and he might well be called Ch'ien-Yi-Hou, such may be the case here.

The character 亖 has a verbal function; the element 木 is not 木 as Kuo and Li have interpreted it, c.f. the 'tree' portion of 玉 and 口 in the inscription. It is an entirely different element.

In line 5, 吏, as understood since Han times, is difficult to interpret in the present context; as it is preceded by 不 the meaning should result along the lines of 'not unworthily', 'not erratically', 'unerringly', etc. The second 不 preceding 不 in line 6 is usually in this context regarded as 不 'great', and the phrase is almost unanimously taken to be equivalent to the common 不 'great and illustrious' of the unattested texts and the 'classics'. This

18. The unattested inscription 12.26 should be cited here:

不從Screen_Lock, possibly 雙; it certainly appears as a proper name in this context. The character preceding it is identical with the third character of line 4 of the attested inscription, but its exact sense is still not clear.
may be correct, but we wonder if the character may not actually contain a negative meaning and that is, in this case, merely the negative particle? 19.

The character is an honorific term that may be compared with similar usage in ins. illustrated later.

Now, the 'review merits' phrase; as noted earlier, we followed Karlgren in using this translation. Kuo observing the connection of the term with military matters suggests it to be 'loosening armour' which might be interpreted as (Chin wen ts'ung k'ao, p. 239a). As far as we can judge, the four characters may be interpreted as 'exempted from military and civil obligations' - it is not clear just what Kuo really means by this. Li suggests the phrase is equivalent to 'exert', 'urge', 'endeavour', etc. Other interpretations might be discussed, but it has been our opinion until now that Karlgren's

19. It is to be expected, of course, that individual characters in Shang and Chou times would often obtain several different meanings; could be both the negative and the meaning 'great', just as (archaic ) is both a prohibitive negative 'don't' and 'mother' in attested Chou period inscriptions. However, the interpretation of as in the 'great and illustrious' phrase is based on references to the same phrase in traditional literature; as the bronze inscriptions which contain it are all unattested, we have at present no reliable means of knowing whether was originally written with the lower horizontal stroke under or whether this character was indeed written only as in Chou times. In the attested inscriptions its use is, with only the present possible exception, merely that of a negative particle.
suggestion suits the unattested cases far better than the several Chinese attempts. However, 'review merits' will not easily fit the character 為 in line 3; it may be stretched somewhat perhaps, as has been done in our translation. The renderings of 'acclaim' and 'praised in full' are based on possible meanings in relation to the context; the actual meaning will not be understood until other relevant attested examples become available. It was originally intended to consider at some length in this paper the score or more examples of the 'review merits' phrase in the unattested inscriptions, but the present inscription has been available for examination only for the last few days and has caused us to reconsider several ideas which now require modification in the light of this text. The phrase is, of course, no criterion of forgery, but there remains the possibility that amongst the unattested examples, forgers have employed the two characters 'incorrectly'; the present inscription suggests this in a number of cases where the term is split, e.g. ins S.131.1: 王為 祚靡; 16 inscriptions exhibit this feature, S.131.1, T.55.2, T.49.2, T.14.1, T.40.7, T.36.2, 50.1, 48.1, 41.7, 40.6, 37.1, 32.2, 31.2, 30.4, 28.5, 15.2, and each one reveals several suspect features. Seven inscriptions employ the phrase in a similar way to that in line 5 in the present text, S.40.3, T.50.3, T.30.14, 68.1, 63.1, 51.4, and 12.2b;
the first, third and last inscriptions may be authentic (i.e. they lack evidence possibly causing them to be suspect); the second and fourth are definite fakes and the remainder are to be suspected. Three inscriptions employ 犯 only, 141.1, T.33.3, and 18.2, but the 'sentences' involved not only differ from the present text example (lines 3-4) but also obviously are cases of 'meaningless groups of characters'. Four remaining cases in the unattested inscriptions, 66.1, 43.2, 93.1, and 90.1, exhibit little in common with the attested text usage; the first two have the reversed sun-tzu phrase and a considerable number of suspect features; the last two are by no means free from suspicion. The above observations are as much as we feel justified in recording at the moment; the possibility that misuse of the phrase will later be determinable amongst the above examples must certainly be kept in mind.

As an historical document, ins. 54.1 is of special importance: it verifies beyond any doubt the use of 'posthumous' names by the Kings of Chou during their lifetimes up to the reign of Mu Wang (1001-947 B.C.); certain terminology found in traditional sources (i.e. 閔 ; 大祝 ; 射) appears with much the same meaning; it has a potential value in augmenting our knowledge of the nature of feudal relationship and the significance of names and titles when the problems discussed above are resolved.
There is no parallel text-type amongst unattested materials, although many of the characters and phrases are to be observed. In only one other inscription, however, does the 'making of vessel' phraseology contain the character 知 , (ins. 52.4) - will this sentence-type be discovered to be a common feature in future excavated inscribed vessels?

4. ins. 5.17  The X Yi.

1. X made for Fu-Keng this honoured Yi-vessel.

Of the several short inscriptions only the present one will be discussed. It exhibits two suspect features: 'mirror-reversed character' (F) and 'incompletely written character' (G). It contains the only case of F amongst the general body of attested documents. G refers to the absence of the _AURA element in the character 矩 . As no particular significance has been given to the two suspect features, no further comment will be made here; the character 矻 , it should be observed, is also essentially classifiable as E 'erratically written character' (c.f. other 'honoured' characters amongst this group, all of which possess two small vertical strokes in the 'body' of the character), but there remains the possibility that this is simply a matter of an abbreviated form; future discoveries may soon clear up the problem as the inscription-type is one that may be expected to turn up in relatively
| Fig. 33. The so-called 'Piao bells' text. |
large numbers.

5. ins. 61.1: The X-Ch'iang Chung.

1. In the twenty-second year, X-Ch'iang engaged in
2. military action (on behalf of) his lord, Han-Tsung, and then led (troops) to attack
3. Ts'in and to .... (harass?) Ch'i; he entered Ch'ang-Ch'eng, and was first (foremost?) in the meeting (of allied troops)
4. at P'ing-Z; (their) military (force having) reached timely strength, (they) ....
5. seized Ch'u-Ching (the capital of Ch'u?). (X-Ch'iang) was rewarded by Han-Tsung, distinguished
6. by Tsin-Kung, and received in audience by the Son of Heaven. Therefore (he has)
7. clearly recorded it in (this) inscription.

Military and civil ....
8. renown for eternal posterity; not to be forgotten.

20. This is the famous 'Piao Bells' text. The sixth character of line 1 has been erroneously transcribed with three 'horse' elements within it; the elements are not 'horses', thus the sound of 'piao' has no real basis. For this reason as well as the impossibility at present of determining exactly what the three elements are, we denote the character by an 'X'.
No introduction is necessary to the text of the famous Piao Bells which has been discussed in detail by Kuo Mo-jo (Chin wen ts'ung k'iao, pp. 240-51) and by Karlgren (B.M.F.E.A., vol. 6, p. 137-49). There are other commentaries to which we have not had access; Karlgren presents a tentative translation which reads:

'In the 22nd year Piao K'iang made x; his prince the chief of the Han house (named) X led (an army, or armies) and attacked Ts'in attacked Ts'ìn, entered Ch'ang-ch'eng (The Long Wall) and first joined (the allied armies) in P'ing-yin; with extreme bravery and relying on their force they made a rush and captured Ch'u's capital; he (Piao) was rewarded by the chief of the Han house, was distinguished by the Duke of Ts'in, was received in audience by the Son of Heaven; therefore he illustrated and recorded it in this inscription; military and civil •••• renown for eternal generations not to be forgotten' (op. cit., p. 137).

Yang Shu-ta (Chi wei chu, p. 161) is one of the few to discard the questionable interpretation of the first character of line 2 as the vessel-name (c.f. Kuo, op. cit., p. 243a); he regards the two characters \( \text{繁} \) as a compound verb with the sense of 'assist' to be related to the matters recorded in lines 2, 3, 4, and 5 - hence, he was 'rewarded by Han-Tsung'. The 'dagger-axe' element of \( \text{繁} \) is clear in one of the large bell texts, but the left-hand element is not so easily discerned; for this reason we suggest the idea of 'engage in military action' which ties up reasonably well with
the ensuing context. The sixth character in line 2 may be equivalent to the particle written in unattested inscriptions as and in the Ch' u Silk Document as ; it is equally possible that it may be Han-Tsung's name. The remainder of the text seems fairly straightforward and the only character requiring particular discussion is the character in line 7; since Han times it has been used in the particle sense of archaic , the present inscription, however, employs it with the meaning of 'record' or 'engrave', which sense has apparently become obsolete. In unattested inscriptions the combination of the 'Ting' element and the 'knife' element is often found - the same combination appears in the Shuo wen; the Silk Document form is, however, the only attested pre-Ts' in example of the character and it is written with an element ' which is certainly not archaic 'knife'. The present inscription thus employs the character in a sense unknown in Han and later literature. Obviously some radical change has been effected since ins. 61 was compiled - probably in Ts' in times. The character 歌 in line 3 is a similar example: it is equivalent in meaning to

1. Ins. employs , together with in the combined meaning of 'cast'; in the present text is similarly used. Although the second character is not perfectly clear it may well be which with its meaning of 'weapon', 'warrior', 'chariot', etc., presents some support for our interpretation.
modern 長 'long' and has the 'standing' element; in Ts'in times this was dispensed with.

Some indication of the nature of Li Ssu's reforms may be assessed with reference to the authentic inscriptions: such characters as 祀, 宗, 征, 建 (城), 會, 武, 樹, 楚, 銘, etc., are in nearly every respect identical with the modern forms, they have experienced only a slight evolution in technical execution and are fundamentally identical in structure. Characters such as: 喜 (彼), 從 (逐 = 率), 靭 (秦), 齊 (齊), 晉 (晉), etc., are easily recognisable but have been altered considerably. Numbers of characters which now have 'radicals' lacked them in pre-Tsin times: 又 (有), 乍 (作), 卯 (厥), 壹 (時), 令 (命), etc. Amongst the general body of attested materials are many scores of archaic characters which bear little or no resemblance to any recorded form: 鐵, 曼, 銘, 許, 記, 言, 言, etc.; the meanings which they represented are now embodied in characters which illustrate no connection with the pre-Ts'in characters. There are also many 'radical' + 'phonetic' combinations which, although freely transcribable into modern script, will not be found in any dictionary. A study directed towards the nature of the archaic script as it appears in fully attested documents is urgently required, for many views
now held are based to too large an extent on unattested and, in many cases, spurious inscriptions. It has, for instance, been stated:

'In our current Chinese writing, which goes back, in principle, directly to Ts' in and Han times, the phonetic compounds (hie sheng), characters consisting of one signific ("radical") and one "phonetic", form the great majority; so-called kia tsie phonetic loans, where a character, without the addition of any signific, stands for another word because of sound similarity, e.g. wan 'scorpion' used for wan 'ten thousand' are comparatively very rare. In Chou time, on the contrary, the kia tsie were extremely common, and the phonetic compounds much rarer than in later times. In fact, the majority of the latter seem to have been created out of kia tsie characters by a later (late Chou, Ts' in and Han) addition of elucidating, specifying significs ("radicals"). What is now the "phonetic half" of the character, was in middle Chou time the entire character used as a kia tsie, phonetic loan ...' (Karlgren, Some Fecundity Symbols in Ancient China, R.M.F.E.A., vol. 2, p. 4).

Karlgren has written further on this matter and in the following two extracts the generally held opinions, particularly in respect to 'loan' character usage, are conveniently summarised:

'It was the great phonetic similarity, sometimes homophony, of large groups of monosyllabic words that gave rise to the principle of phonetic loans (kia tsie), the character for one word being applied, as a loan, to a totally different word that was identical or similar in sound, a principle
which in its turn, by the elucidating addition of determinatives ("radicals"), led to the creation of the great, even dominating category of characters known as hie sheng, phonetic compounds, consisting of one "Radical" and one "Phonetic". (Grammata Serica, B.M.F.E.A., vol. 12, p. 1).

It is possible to write without distinguishing radicals as long as the subject is limited to a few well-known religious formulae (as on oracle bones or ritual bronzes). It is practically impossible when it comes to writing extensive lay texts with thousands of different words. The ambiguity in using one and the same kia tsie for a dozen different words would be unendurable.... The great majority of kia tsie loan characters must have been supplied with elucidating radicals (i.e., changed into hie sheng) in the moment there arose a real literature, i.e., already in Chou time. The hie sheng characters which we find in the Shuo Wen are therefore, in principle and composition, those that were in regular use when the Chou culture flourished; only their technical execution was abbreviated and simplified and normalized through the siao chuan reform of Li Si's. (On the Script of the Chou Dynasty, B.M.F.E.A., vol. 8, p. 177).

In this last study, Karlgren has suggested that the employment of radicals "may nevertheless have been in practical use in everyday life and in profane writings already in early Chou time" (p. 178); it was in 'sacred script' that the radicals were so rarely used. The Ch'u Silk Document, although a 'sacred' text, and the Bamboo Tablets from Changsha fully support his remarks, but as far as the attested bronze (i.e., 'sacred') texts are concerned, a similar extensive use of
'radicals' is equally evident as may be observed in the various genuine inscriptions reproduced in this paper. Furthermore, there is practically no evidence - certainly no definite evidence - of wide-scale 'loan' character usage in the attested texts. Some characters possess two or more meanings, e.g. ://% in ins. 614 (line 1) differs somewhat from its normal sense of 'make'; many characters obtaining the same structures as their modern counterparts, e.g. :{h. in ins. 54a, may exhibit meanings that now are obsolete. In such cases there is no support in asserting that  //= is a 'loan' for //= or that //= is a 'loan' for //= or //= as the commentators have done; the assertion implies that both //= and //=, //= and //=, were co-existent characters and that one or the other was loosely used when the particular sense involved was to be expressed. In the numerous Chinese commentaries on the inscriptions exceedingly excessive resort is made to this supposed feature of archaic writing. By means of its application almost any required sense can be forced out of even the most difficult of passages; a certain amount of 'loan' character usage existed in ancient times, no doubt, but the attested documents give no indication that it was a general feature of written expression. On the contrary, the archaic script as executed in a variety of document types, shows quite clearly in its richness of 'radicals' that so primitive a method of expression
would hardly be required. When the documents themselves are closely studied the student must search far for definite cases that may possibly be described as 'loan' usage.

As regards the development of the script itself, considerable revision of recent views must result; Wang Kuo-wei's discussion on the subject (Han tai ku wen k'ao) is conveniently summarised by D. Bodde:

1. The Seal, or to distinguish it from the Small Seal, the Large Seal, was a highly pictographic script derived from the earlier script of the Shang or Yin bone inscriptions. It was originally used under the Western Chou dynasty, and later continued to be employed in Western China.

2. After the Chou dynasty moved its capital from the west to the east in 771 B.C., and went into decay, a new form of script, full of corruption and variants, evolved in Eastern China. This was mistakenly termed the Ancient Script by Han scholars, because by their time it could only be deciphered with difficulty.

3. The state of Ch'in, expanding over eastward in 350 B.C. established its capital almost on the site of the ancient Western Chou capital, near present Sian, and thus inherited the Seal script. When Ch'in unified China in 221, Li Ssu simplified the Seal script into the Small Seal and made its use universal. This process was probably only a mechanical simplification and did not introduce any radically new structural feature into the formation of Chinese script.

4. The Li script had long existed side by side with the Seal as a simpler form, but became important only in Ch'in times as a still further simplification of the Small Seal. By the
end of the Han dynasty it had evolved into very much the kind of Chinese writing we know today.' (China's First Unifier, Chapter 8, p. 156-7).

This has already been disputed by Kuo-Mo-jo (Chin wen ts'ung k'ao, p. 251b) on the basis of the Shou Hsien inscriptions; the attested script generally exhibits a remarkable continuity both from chronological and geographical aspects - a continuity broken radically in Ts' in times. Unattested inscriptions, on the other hand, tend to support Wang's thesis, and a close parallel of the archaic forms with many Shuo wen characters may be observed. Attested script also exhibits parallels, but there is a difference the significance of which we shall not attempt to illustrate at this stage.

The preceding notes on the archaic script are representative of the arguments we propose to put forward in a separate paper; we believe that the study of the archaic script along

22. In the preceding discussion we have quoted mainly from Karlgren's work as he has been working continuously in this field of research for some decades, and his views are conveniently expressive of much general opinion based as it is on a confusion of both attested and unattested documents. Numerous other authorities should also be consulted, but to do so here would call for too lengthy a digression; we have purposely omitted, for instance, an interesting study by H. G. Creel wherein the extent of 'radical' + 'phonetic' (i.e., hsing sheng) characters is shown to be considerably less than the 90% usually stated (On the Nature of Chinese Ideography, T'oung Pao, vol. 32). How this fits in with the picture of the archaic script roughly drawn above cannot yet be assessed; there is no certainty that the characters which we loosely call 'radical'+
systematic lines - particularly the division of documents into attested and unattested groups - will not only clear up several misconceptions in regard to the nature of the archaic script but also will assist in the determination of faked inscriptions amongst the unattested materials.

As regards the content of ins. 61.1 little need be discussed here for the inscription is adequately dealt with by Karlgren; one matter only need concern us, namely, the record of the capture of the capital of Ch'iu. If this is indeed the interpretation, and it is highly probable that it is correct,

22. 'phonetic' combinations are all indeed such, no doubt there will be sufficient materials available soon to determine this matter. In this same article (p. 87) Creel has put forward a view, the importance of which is illustrated in various parts of the present Section: 'From the phonetic point of view, Chinese has long been studied by eminent scholars, the importance of whose researches it would be impossible to over-estimate. But comparatively little has been done by Western scholars toward the serious, systematic study of Chinese ideography from the point of view of the methods by which, and effectiveness in which, it conveys the thought of the writer to the mind of the reader. This is a field for research which is of profound importance for philology, psychology, and the general project of human history.' The necessity of studying the archaic script from visual rather than phonetic aspects is the point we have in mind in quoting the above; the characters cannot all be treated as ideographs, of course, but the understanding of the archaic texts will require a considerable amount of comparative-analytic research wherein each character must be treated as a symbol of meaning rather than a recording by partial phonetic means of meanings verbally expressed. In other words, the documents must be treated as literary expression in a concise form as opposed to their being 'the natural reproduction of the spoken language' (Karlgren, Philology and Ancient China, p. 42).
we have then record of an event not perpetuated in the Tsao chuan or in any other traditional source. The matter has worried the Chinese commentators and Yang Shu-ta attempts to solve the problem by regarding the passage as merely a piece of bravado on the part of the compiler. Although Chinese historiographers, as much as the scribes of any other ancient or medieval culture, have not been entirely innocent of such extravagant recording, it does not, however, appear to be fanciful propaganda in the present text — to doubt the record merely because it does not fit traditional accounts will only result in retarding knowledge of this period. 23.

The long inscription is cast in each of 4 bells of the set while 8 smaller bells contain the four characters: ‘X-Shih's bell’. Constancy prevails throughout the set, the bulk of which is at present lodged in the Sumitomo Collection in Kyoto; there is little reason to doubt the date of 550 B.C. for their manufacture and thus together with the preceding inscriptions they exhibit the general high quality of script execution 24.

23. The very nature of the present inscription does not allow for extravagant phraseology; the Ts'ai bronzes, shortly to be examined, however, illustrate examples of emotional expression which is difficult to translate and amongst which sentences more concrete in content may well be idle statements not to be taken too literally.

24. A problem which is still requiring solution is the matter of the 'year-date': 'What is meant by the "22nd year"? All the interpreters so far have taken it for granted that since the t'ien-tsi "Son of Heaven" occurs later in the inscription, it must refer to the King of Chou, and they have adduced other examples of bronze inscriptions following the royal dating
that obtained over the preceding five centuries. Amongst unattested materials there are no inscriptions that may be directly paralleled with the present.

6. ins. 33.7 Ch'U Wang Yu Kung Ting.

(a) The King of Ch'U and (?) Yu-Kung fought in battle and collected military metal. In the first month, on an auspicious day, both parties cast (this) ... Ting-vessel for the purpose of joint sacrifices.

(b) X X.

(c) Three Ch'U.

(d) The X-pen-official, P'an-T'ao, assisted (?) Ho-X to manufacture it.

7. ins. 33.6

(a) The King of Ch'U (and) Yu-Kung fought in battle and collected military metal. In the first month, on an auspicious day,

though treating of feudal court events. It is indeed very probable that this is right. And yet we should, I think, verify whether there is any other possibility. Since the bells celebrate a henchman of the Han-house, which in its turn had the Tsin as their feudal lords, the only imaginable alternative to the royal Chou dating would be that of the Tsin house. (Karlgren, op. cit., p. 139). We would venture to suggest that there is the possibility that the Han ruler may have required his henchman to employ the date of his own reign which, no doubt, would be constantly referred to in the Han territory. Such an explanation would help little towards dating the bells and reliance would have to be placed on recorded events. That each feudal State maintained its own dating system of years would seem to be expected in the loosely knit organisation of the Chou Kingdom.
Fig. 35. Ins. 29.10.
both parties cast (this) .... Ting-vessel lid for the purpose of joint sacrifices.

(b) X X.

(c) The X-pen-official, Shih-Ho, assisted (?) Ho-X to manufacture it.

8. ins. 29.10

(a) The King of Ch' u (and) Yu-Kung fought in battle and collected military metal. In the first month, on an auspicious day, both parties cast (this) .... P'an-vessel for the purpose of joint sacrifices.

(b) The X-pen-official, Ssu-T'o, assisted (?) Ch'en-Hsin to manufacture it.

These are the three longest texts amongst the famous Shou Hsien bronzes unearthed nearly 30 years ago; the inscriptions were incised after casting. The script, although representative of that current in the State of Ch' u, exhibits a striking identity with the Middle States' script in the authentic inscriptions. Throughout the Shou Hsien bronze texts constancy prevails with the exception of a few cases noted earlier as spurious copies. Some remarks regarding the above translations are required.

It has been a general practice to interpret the two characters which we have transcribed as Yu-Kung as the name of the King of Ch' u, and they have been erroneously paralleled with the prince, Hsiung Han, mentioned in the Shih Chi who
later became Yu Wang (237-228). Karlgren summarised the main points relating to his acceptance of this theory:

'\[\text{That } \text{Yin of the inscriptions is equal to } \text{Hiung of the literary sources, the first syllable in the names of various princes of Ch'\u is absolutely certain. } \text{熊 was an arch. } \text{The } \text{熊 has several dictionary readings, corresponding to arch. } \text{熊, } \text{熊 etc. Kuo Mo-jo is decidedly right in identifying the prince here as } \text{熊维 Hiung Han of the Shi ki, i.e. Yu Wang (237-228 B.C.). This vessel was found in Shou ch'un, Shou-hien, in Anhuei, the capital of Ch'\u from 241 B.C.} (\text{Yin and Chou, p. 59}).\]

The argument is based on two assumptions neither of which has any real basis in fact: \[\text{繁} \text{ is transcribed as } \text{繁, and } \text{繁 is transcribed as } \text{繁}.\] The archaic structure of the first character is \[\text{繁}; it is composed of two elements } \text{繁} \text{ and } \text{繁, the latter is the modern element } \text{繁} \text{(c.f. ins. 13.6) but the former can hardly be accepted as } \text{繁}.\] Unfortunately the attested inscriptions do not contain examples of this character; they do, however, employ the similar characters \[\text{繁} \text{ and } \text{繁, which may be used as a basis of comparison; the Stone Drum Text No. 8 has a character } \text{繁, in which the upper element is the element } \text{繁}.\] These three examples illustrate the rather questionable transcription of \[\text{繁 for } \text{繁}.\]

The second character is written by Kuo Mo-jo as \[\text{繁} \text{ and
owing to the perpetuation of this error several scholars have sought to read an unnecessary significance in the name. There is no \( \text{†} \) element in the archaic form at all! The ancient engraver took care to write exactly what he intended to appear - the element is \( \text{†} \) which is quite different from \( \text{†} \); it is a very easy matter to check through the genealogical lists of the Shih chi and find a name combination superficially similar to such an archaic compound and then transcribe this combination into a modern form containing elements in common with the characters in the genealogical list name. Kuo’s ingenious discussion (K‘ao shih, p. 172a) regarding the evolution from \( \text{†} \) to \( \text{†} \) is based entirely on unattested inscriptions several of which are to be strongly suspected as forgeries. His argument is otherwise unreliable, for he has not studied the character closely enough to observe that the centre vertical stroke does not fall below the second horizontal stroke; he does not notice, too, that the character \( \text{†} \) in ins. 2.4 and 33.2 (which he transcribes as \( \text{†} \)) has a continued vertical stroke and because of this the ‘heart’ element is written aside of it so that the vertical stroke is unimpeded. The position of the ‘heart’ element in the character \( \text{†} \) is such that it is clearly evident that no continuation was either intended or required. Furthermore, because of the two strokes above \( \text{†} \), there is the possibility that the
complete portion is on its own an element whose sound is unknown. The Ch'ü Silk Document contains a character with the element (2.10:29) which serves to show the incorrect rendering of as as well as the truth of our assertion that there is no character in these inscriptions.

In the Ch'ü bronze texts are two further examples of names following the characters Ch'ü Wang: ins. 13.8, a sword text which has the characters and ins. 13.6 with the characters ; if these are the names of the Ch'ü Wang in each case - they may quite well be so interpreted - then they record three rulers of Ch'ü who are not listed in traditional sources. As far as we are aware, no commentator has discussed the three names together; we make no attempt to present a final solution of the problem here, but merely suggest that there is a possibility that the three names are not necessarily those of the King (or Kings) of Ch'ü - they may be names of other persons who together with the ruler jointly cast the vessels concerned. This interpretation is supported by the context in each case:
(a) the character is written in a form which corresponds to 'two ancestral temples' (?), an interpretation which is perhaps a little romantic but not beyond serious consideration,
(b) the character (modern 共) likewise refers to the
activities of two people: 'joint sacrifice' as the phrase in question is rendered in our translation,

(c) the character 動 was the clan-name of the princes of Ch'ù, yet one must search far amongst even the traditional texts for any evidence pointing to a general practice of rulers of States referring to themselves by means of their clan-names. The inappropriateness of the clan-name in contexts of the present kind has not previously been considered,

(d) ins. 21.19 contains the name 楔 楠 thus according with traditional accounts particularly well; the inscription offers little evidence of either authenticity or forgery, and is unattested. Assuming it to be genuine, one might well wonder that the Kings of Ch'ù should employ a character 動 as their clan-name when the character 動 was already available to them in an archaic form.

The short texts accompanying the long inscriptions probably record the names of the artisans or officials concerned with the manufacture of the vessels. Several of the Shou Hsien inscriptions are executed in an ornate script; ins. 12.22 (Fig. 9, opp. p. 106) presents an interesting example. Although highly stylised the fundamental structure of the characters is preserved; the scribe has permitted himself a certain freedom in omitting elements, e.g. 楠 as 楠, and in adding elements, e.g. 友 as 友, (note also Fig. 36).
Fig. 37. Ins 46.2; engraved on two vessels excavated at Loyang.
The purpose is obviously an aesthetic one and has no bearing on the principle of constancy as applied in this paper.

9. ins. 29.11 Yu X Ch'ên Mu Fang.

In the King's fifth year, the year that Yu-X (and) Ch'ên-Mu (?) for the second time (established the affairs) made preparations for a military expedition (?); in the first month of winter, on the day, mou-ch'ên, (they) greatly vanquished (?) the Count of Yen. Ch'ên-Y entered and (attacked) ravaged (the city of ?) Yen .... .... .... booty.

The vessel is described by Andersson, The Goldsmith in Ancient China, B.M.F.E.A., vol. 7, 24-9) while a short account of the inscription by Karlgren is also incorporated.

10. ins. 46.2 Ming X Chun Ssu Tzu Hu.

In the tenth year, the fourth month, on an auspicious day, Ming-X-Chun's (the lord, Ming-X) heir-son made and cast (this) honoured Hu-vessel. Harmoniously and respectfully (?) (may it bring) health and happiness (to) our family. Amply and liberally, modestly and elegantly (may we) (receive) aspire to great virtue. (We) pray that (without limit) unceasingly for a thousand, ten thousand, a million years, sons of (our) sons, grandsons of (our) grandsons, will forever employ it.

Two vessels excavated from the same site as the Piao Bells contain this text engraved on them; abstract expressions such as abound in this inscription are commonly found in Eastern Chou and Chan Kuo period bronze texts, and present often considerable difficulties in interpretation. Numerous synonyms
are available, many with slightly different shades of meaning and seldom can the translator feel confident that he has captured the original sense of the highly emotional phraseology. It may be observed that two characters, 尊 and 意, which normally possess 'radicals' in the archaic script lack them here; the unusual 'descendants' phraseology is duplicated nowhere else.

11. ins. 2.19  The Chung Mu Sheng Vessel.

1. Chung-Mu-Sheng of Chiang-Ch'uan
2. herself made (this) ....-vessel.

The inscription is reversed mirror-fashion and reads from left to right; this feature may possibly be due to an error in reproduction.

12. ins. 82.1  The Ts'ai Hou X Chung.

1. In the 'cheng' fifth month, the first quarter, the seventh day (meng-keng), (kang)
Ts'ai-Hou (the Marquis of Ts'ai) said:
2. Although I am a petty and insignificant person ( 足卑 ) I have not dared to remain in idle repose; (miwang)
3. with reverence (not frivolous) and care (diq) (I) have assisted the King of Ch'u (Ch'u Wang); (guiwang)
蔡庶鐘

1. 佳正五月之初吉孟庚，蔡庶鏤日：
2. 余唯末小子，余非敢寧忘；
3. 有庶不易，輔右釐王；
4. 翟□鶉政，天命是延；
5. 定均庶邦，休有成慶；
6. 既志于忌，延中告聼；
7. 均子大夫，建我邦國；
8. 鶉令庸□，不愆不貳；
9. 自乍鋘鐘，元鳴無甚，
10. 子孫鼓止。

Fig. 38. Modern character transcription of ins. 82.1.
4. firmly (have I) attended to the administration (息政) and the Heavenly Mandate has been good; (受之)

5. (I have) uniformly stabilised the numerous territories (平) and have received full approval. (平)

6. Having (accomplished this) whole-heartedly with deference (敬) virtue has been prolonged. (敬)

7. All (you) princes and officials (眾官) who founded my territories and State (受)

8. cause the Mandate ....... unfailingly and unerringly. (受)

9. Myself made (these) (歌) sonorous bells; (息政) 周武 time without (即) 壽 sons and grandsons strike them. (息政)

Details of the important finds unearthed last year at Shou Hsien, Anhui, incorporating the above inscription and the two which follow later, may be found in the Wen wu ts'ian k'ao tz'u liao (vol. 8, 1955, 28-39), and reproductions and transcriptions of the texts with commentary by Kuo Mo-jo appear in the K'ao ku hsüeh pao (vol. 11, 1956, pp. 1-6). Reproductions of the rubbings are unfortunately of a poor quality thus
detailed examination of the script is difficult. There is ample evidence, however, of constancy. The character 'make' in ins. 92.3 has a 'word' element, 亡, ; this is a case of variation in structural composition. Although structural composition may have varied both in place and in time, the available attested inscriptions illustrate very few examples of individual elements varying structurally throughout the texts. The element 亡 (modern 兩), for instance, is written as such in the majority of cases; in ins. 7.13, however, it is written as 亡 . Communications in ancient China were, no doubt, not of a particularly high standard, and it would not be surprising to discover a certain degree of variation of the script from one locality to another; it is remarkable, however, that such variation manifested in the attested texts is limited to a small number of cases of differing combinations of elements in the same characters, and a few rare examples of the elements themselves being constructed on different principles. An astonishingly high percentage of standardised elements and characters is typical of the script from early Chou to the Chan Kuo period in inscriptions on bronze and other artifacts from widely spaced sites.

The three inscriptions now under survey were compiled in accordance with a certain rhyme pattern which is illustrated in the translations by Karlgren's reconstructed archaic sounds.
Rhyme pattern of ins. 82.1

1. 0 0 0 0 0 0 0 0 庙 (kāng) A 0 0 0 0 0 0 0
2. 0 0 0 0 子 (tsiāng) b 0 0 0 0 忘 (miwān) A
3. 0 0 0 易 (dīēg) b 0 0 0 王 (gīwān) A
4. 0 0 0 政 (tīēng) c 0 0 0 王 (kīwān) A
5. 0 0 0 邸 (pūng) c 0 0 0 邸 (kīwān) A
6. 0 0 0 蜀 (gīāng) d 0 0 0 蜀 (lōk) E
7. 0 0 0 難 (piāo) d 0 0 0 難 (kuwāk) E
8. 0 0 0 靈 (qiāng) f 0 0 0 靈 (tīāk) E
9. 0 0 0 鐘 (tīāng) f 0 0 0 鐘 (gīāng) E
10. 0 0 0 止 (tīāng) E

Rhyme pattern of ins. 92.3

1. 0 0 0 0 0 0 0 0 友 (gīāng) A 0 0 0 0
2. 0 0 0 命 (miāng) b 0 0 0 義 (bīāng) A
3. 0 0 0 悅 (dīāng) b 0 0 0 子 (tsiāng) A
4. 0 0 0 盟 (māng) b 0 0 0 食 (tiāng) A
5. 0 0 0 言 (ziāng) a 0 0 0 知 (gīwā) C
6. 0 0 0 言 (ziāng) a 0 0 0 言 (dīāng) C
7. 0 0 0 母 (māng) a 0 0 0 (miāng) C
8. 0 0 0 殘 (qiāng) d 0 0 0 (dīāng) E
9. 0 0 0 殘 (sīāng) d 0 0 0 好 (hōg) E
10. 0 0 0 穎 (gīwāng) d 0 0 0 好 (dīāng) E
11. 0 0 0 穎 (tīāng) d 0 0 0 止 (tīāng) E
12. 0 0 0 穎 (kīāng) d

Fig. 39. Rhymes in the Ts'ai bronze inscriptions.
For convenient reference diagrammatic illustration is appended opposite - the rhyming characters together with Karlgren's reconstructed archaic sounds. Several 'subsidiary' rhymes (denoted by small letters) do not accord smoothly but generally the reconstructions fit the rhyme pattern of the inscriptions. It is not proposed to discuss the significance of the variations here at any length for this is best left to linguistic specialists; the 'c' and 'd' subsidiary rhymes of ins. 82.1 and the 'c' rhymes of ins. 92.3 seem to require particular consideration. Contrary to our normal custom of following the alignment of the original texts, the present group is arbitrarily divided into lines of 8 characters in accordance with the rhymes. The reversal of the phrase in order to facilitate the rhyme is a particularly important support to comments made earlier regarding the reversed sun-tzu phrase (see p. 232) so, too, the structure of lines 4 and 8:

Although these are merely elements of subsidiary rhymes, the variation in word order here has obviously occupied the attention of the compiler as much as that of the major rhymes.

13. ins. 92.3 The Ts'ai Hou X Lu

1. The first year, the first month, the first quarter of the month, on the day
蔡烝鼐鹽．

1. 元年正月初吉辛亥，蔡烝鼐
2. 爻其大命，上下陟祔；
3. 敬敬不惕，肇軏天子；
4. 用誥大孟，姬媲，蔡鼐；
5. 禮言是昌，賢盟嘗知；
6. 祐受母已，祿謨整誼；
7. 賴尹王母，穆々_ENCODE_SYS_CUT
8. 兇□厥終，威義遂□
9. 霖夏剖商，康懿穆好；
10. 敬配吳王，不誼考壽；
11. 子孫蕃昌，永保用止，
冬脭無疆．

Fig. 40. Modern character transcription of ins. 92.3.
hsin-hai (g'ag)

2. Ts'ai-Hou, X, reverently fulfilled (accepted the honour bestowed on him by) the Grand Mandate, (mjäŋ) the upper and lower (officials?) ascended and paid homage (?) (b'xäg ?)

3. Respectfully and (not carefree) attentively (d'äng) (will he) diligently assist the Son of Heaven. (tai̍t)

4. Therefore has made (for) the great first lady, (mäng) Chi-X, (this) sacrificial Lu (?)-vessel; (?täg ?)

5. in the .... sacrifices it is to be employed (z'xäg) .... covenants and have (obtained) peace (g'wa)

6. blessings received unceasingly (z'xäg)

.... .... .... (d'ä)

7. Maintain moral integrity of (?) (her) royal mother, (mäg) solemnly and resolutely, (m'äwö)

8. .... .... .... (d'äng ?) Majestically and far-reaching (d'ö)

9. the divine Hsia and the .... Shang. (s'äng)

25. This is the earliest reliable record of a reference to Hsia in pre-Ts'in texts; two other bronze texts - the Ts'in
Peacefully ...., reverently love ( 넘q)
10. and devoutly mate with the King of Wu (qiwang)
avoiding not a ripe old age ( 넘q)
11. Sons and grandsons (may they be) numerous and
prosperous ( לכך) and eternally preserve
and employ it ( 그래)
12. for decades and years without end. ( Tactical)

25. Kung inscriptions (see K'ao shih, P. 247-50) also refer to
Hsia, but these are unattested. H. G. Creel has made an in­
teresting study of the Hsia and summarises his results as:
"The traditions concerning a Hsia dynasty are mentioned very
little in any literature as early as the early Chou period, and
every reference to them occurs in literature of a highly propa­
gandistic nature. This and other facts warrant the hypothesis
that the story of a Hsia dynasty was a part of the political
propaganda of the Chous, designed to give precedence and legi­
timacy to their displacement of the Shang house and to secure
acceptance of their rule by the subject population .... The
evidence warrants us in concluding that while there was not a
Hsia dynasty, in the traditional sense, there was a state by
this name ..." (Studies in Early Chinese Culture, p. 130).
The present inscription offers interesting support to Creel's
views - as it is datable in the early 4th century B.C., it
illustrates the current acceptance of a Hsia dynasty which
anciently had similar status to that of Shang. At this time
there was apparently no question of its being a dynasty - the
legend, if it is indeed such, was already current. There is,
however, the conspicuous absence of any reference to Hsia in
attested Shang texts and none in Western Chou bronze texts
(attested or otherwise). Creel's suggestion that the legend
of the dynasty is to be linked with the memory of a Hsia State
is based on occurrences of the term Hsia in traditional sources
most of which are datable (if authentic) not much earlier than
the Ts'ai inscriptions. The Shu and the Shih only are gener­
ally regarded as earlier compilations. As ins. 127.1 illustrated,
the conquest of Shang was a much later affair and therefore it seems possible that even the Shu and the Shih with their
'highly propagandistic' accounts of the matter may have had con­
siderably later origins than is supposed. These points may, no
doubt, be more clearly understood as further relevant inscrip­
tions become available.
The rhyme pattern here is particularly consistent both in what we have tentatively termed 'major' and 'subsidiary' rhymes; after the statement of the date and the mention of the Marquis, the rhymes as in the preceding inscription, form units of four characters; in each group of eight characters a complete unit of sense is effected.

Kuo transcribes the fourth character in line 3 as $\text{哩}$; this is incorrect for the character is written $\text{ предназначен}$ ( düzey ), the right-hand element of which is quite different from $\text{是}$ ( düzey ) in the preceding inscription; the rhyme pattern also supports this observation. A certain liberty has been taken to render $\text{年}$ which Kuo says 'is a loan for $\text{年}$'; anciently 12 years were reckoned as one $\text{年}$ based on Jupiter's 12 year orbit', as 'decade', thus avoiding a cumbersome English rendering. There is no character $\text{年}$ in the inscriptions; $\text{年}$ is employed as 'winter' (ins. 29.11) and in several unattested inscriptions it appears in the sense of $\text{年}$ 'end'; Kuo may be correct in reading it as $\text{年}$ in the above sense, but with the meaning of 'winter' acceptable sense results: 'winters and years without limit'.

14. ins. 52.3 Wu Wang Kuang Han.

1. In the King's fifth month, the second (?)

26. cf. Legge: 'He is twelve then, that is a full decade of years, the period of a revolution of Jupiter.' Siang, 9th year, p. 441.
吳王光鑒

1. 佳王五月初吉白期
2. 吳王塗其吉金，玄銋自銋。
3. 自作弔姬寺吁宗疆蒼
4. 言已！弔姬， commerci；乃后孫勿忘。

Fig. 41. Modern character transcription of ins. 52.3.
quarter, on an auspicious day - the seventh day (ch'u-keng) (k'ang)

2. the King of Wu, Kuang, selected this lucky metal, black lead, and white tin (kwang?)

3. to make (for) Shu-Chi, Shih-Yu, (this) sacrificial .... .... Han-vessel. Employ (it in) sacrifices, employ (it in) filial loyalty; a ripe old age without limit (k'ang)

4. Go then, Shu-Chi, respectfully and devoutly; your descendants, must not forget (this honour) (miwang).

The number of characters in each rhymed line is not consistent; the first two are possibly not intentional rhyme - the compiler being content with only partial rhyme towards the conclusion of the text.

The three inscriptions are of considerable historical importance, particularly the present one which is datable during the reign of King Ho-Lu of Wu (513-494 B.C.). This King was known as the Kung-tzu, Kuang, before he assassinated his predecessor, King Liu (525-513 B.C.). In the inscription he refers to himself as the King of Wu named Kuang, thus maintaining still the name by which he was known before his assumption of the royal title. He cast the vessel in honour of a younger female relative who was to be sent as bride to the
ruler of Ts'AI - the bridegroom is not mentioned in the text but the location of this otherwise unrelated inscription in the Ts'AI grave seems certain proof that the lady, Shih-Yü, was married to the Marquis mentioned by name in the two preceding texts; the inscribed bowl was portion of her dowry. The marriage was effected during King Ho-Lu's lifetime; during the lifetime of the same Marquis of Ts'AI a similar marriage was contracted with the King of Wu (unnamed) and a female relative of the Marquis - the record comprising ins. 92:3. Why this vessel should have remained in Ts'AI is somewhat an enigma. Even more puzzling is the intermarriage of princely families bearing the same surname 鬼 ; Kuo notes a relevant example in the traditional texts, but it seems to be an unusual happening and hardly one that could be considered customary.

It is unfortunate that the dates are not fully understandable; the 'first year' of ins. 92:3 seems to be that of the Marquis of Ts'AI who is apparently concerned with two major matters: (a) his duties towards the Son of Heaven and (b) his alliance by marriage treaty with the King of Wu. As regards the former, the Marquis states quite explicitly his humble acceptance of the Grand Mandate and his intention to

27. Cf. large array of evidence assembled by Sun Yueh, Ch'un ch'iu shih tai chih shih tsu, pp. 20-21.
serve diligently the Son of Heaven, which phraseology together with the 'upper and lower (officials) ascended and paid homage (?)' implies, we believe, that the Marquis had only recently been invested as prince of Ts'ai. His urgency in marrying Chi-X (a lady of probably comparatively high station as contrasted with Shih-Yu in ins. 52.3) to the King of Wu was, no doubt, one of several diplomatic measures needed for his future security. Within five months we find in ins. 82.1 evidence of his wooing the King of Ch'u whose territory bordered the greater half of Ts'ai. If the dates are taken thus as those referring to the reign of the Marquis of Ts'ai, they seem to suit the interpretations we have suggested (particularly in respect to ins. 22.3) better than would the acceptance of their being references to the Royal dating system. The Wu inscription differs considerably in its employing the character 'Wang' in the date and also a month-quarter term parallelled nowhere else in Chou period documents. If this date should be interpreted as the fifth month of the first year of King Kuang's reign one might well appreciate his desire to further friendly relations with Ts'ai at the earliest opportunity in view of his rather unethical method of promoting his accession as King of Wu.

22. The last four characters in line 5 of this inscription may possibly be interpreted as 'marriage covenanted to maintain peace'. 
An interesting investigation is possible on the basis of the above three inscriptions together with relevant records in the Tso chuan, the Shih chi, and other sources. Kuo has brought some ingenious ideas forth in the space of a few pages in his short study but his determination of the Marquis's name of 弦 as 产 – the name of Sheng Hou (470-455 B.C.) – is not convincing. The presence of the Wu inscription in the grave fixes the earliest possible burial date at 513 B.C., Wu was extinguished by Yueh in 472; thus Sheng Hou who commenced his reign in 470 would hardly be concerned with marriage arrangements with Wu; the vessels must date between 513 and 472 and if the year of reign of ins. 92.3 refers to that of a Ts'ai ruler it would be the opening year of Prince Ch'eng, 489 B.C.; if the first year of the King of Chou, it would be that of Yuan Wang, 474 B.C., which is, however, rather too close to Wu's date of extinction.

These then are the more important of the attested bronze texts now available for study, and in the contents of the longer inscriptions, in particular, the student finds many items which do not accord with his knowledge of the unattested materials. To illustrate this fully and effectively even with the present small body of authentic materials would require the space of several score more pages and considerable illustrative notes. Therefore, the preceding study
should be regarded as a rather tentative one in which the main aim is merely to give some indication of the characteristics of genuine bronze inscriptions. Several of the inscriptions have been transcribed, translated, and the notes compiled in a matter of a few days - the reproductions arriving only a short while ago.

Additional Note.

Since the above Section was written vol. 12 of the K'ao ku hshek pao arrived from China and two further commentaries of interest on ins. 127.1 and the Ts'ai bronzes appear within its pages. A fairly clear photograph of the text area of ins. 127.1 is reproduced in Plate 2 following T'ang Lan's commentary on this text; a copy is appended (our Plate 13 which unfortunately has not preserved details very well). We note only the following points in T'ang Lan's article:

(a) he maintains 王省 (line 1) - lower part of the obscured character is slightly like 但 but not definitely so,

(b) sixth character of line 2 read as 待 (modern 出),

(c) second character of line 3 read as 但 but the photograph strongly supports rendering of 立; the fifth character in this line is read as 門 but again the photograph shows more clearly than earlier published rubbings that it is definitely 宗,

(d) T'ang Lan reads the name Chien as 鬆 (麋) pointing out that the lower element is 麋 not 麋; this seems to be the case in the photograph, and we suggest that his reading is correct.

Ch'en Yung-chia's study of the Ts'ai bronzes in the same issue contains considerable information about this important find; in a letter recently received from him we were informed that a publication devoted exclusively to the Ts'ai bronzes is shortly to be published with clear reproductions of the inscriptions - it will be eagerly awaited. In his transcriptions (p. 109) are a few slight variations in interpretations to
those of Kuo Mo-jo which we have generally followed. They will not be recorded or commented on here; it is best to await the publication of clearer reproductions in order to check more thoroughly Chen's transcriptions. He maintains, for instance, 比 for 比 (see p. 412, Section Six) showing his unawareness of the subsidiary rhymes as well as a misinterpretation of the archaic form in question.
CONCLUDING SECTION.

In this survey the research has largely tended to be 'destructive' rather than 'constructive'; the aim has been to find ways and means of clearing an important group of documents of spurious texts presenting often untenable evidence of Western Chou institutions and culture. To do this, it has been necessary to limit the investigation to rather narrow channels; it has been possible, however, to observe at times the effects of a 'scientific' approach both from the point of view of an historian and that of a philologist. With the same disciplines in research, we have indicated the need for a revision of ideas on the nature and development of archaic Chinese script. Authentic script illustrates features which hitherto were generally believed to date no earlier than Ts' in and Han times: 'radicalised' characters were extensively employed and although numbers of characters now possessing 'radicals' lacked them in Chou times, they form only a small proportion of the total at present known. The written language differs little in appearance and in function to that known in traditional sources from Han times; the characters, however, underwent a fundamental change before the advent of Han - probably during the period of the Ts'in Empire. Not all characters were affected, but a considerable number of archaic forms are now no longer recognisable for what meanings or sounds they earlier represented. Some of
the 'reformed' or 'standardised' characters differ much from their earlier prototypes, but seen in appropriate contexts are fairly easily recognised.

Both from a chronological and a geographical point of view, the script appears, to a remarkable extent, to have been standard in structure throughout several of the Middle States and Ch'ü - particularly in respect to character elements; structural composition of certain characters, however, seems to have varied regionally. It is not yet clear exactly how far the pre-Ts'in script may be termed 'standardised', but the attested evidence points strongly towards a considerable degree of uniformity.

Attested texts and the script in which they are written exhibit little sign of 'loan' character usage. In Chou times radicalised characters were so commonly employed that this primitive method of expression would have found little favour and certainly would have been a hindrance in written expression. The nearest approach to 'loan' character usage is the occasional example found of certain characters exhibiting two or more meanings somewhat unrelated - a feature common enough in modern colloquial and literary Chinese. There is not, however, the widespread and loose interchange of characters as imagined by some scholars. By means of the 'loan' character theory Chinese scholars effect practically any desired meaning from both easy
and difficult passages. And, it is only too evident, the meanings so obtained are in many cases preconceived ones. The extravagant manner in which Chinese scholars have resorted to the 'loan' character theory in their interpretations of the archaic texts is neither scientific nor supported by the attested documents.

It is in the content of the inscriptions, however, that material of great interest will be found. The few attested inscriptions discussed in some detail in the previous Section indicate the possibilities that await the historian and the nature of documents that will doubtless become available in increasing quantities during the next few years. There remains still many thousands of Shang oracle bone texts scientifically excavated which must supplement studies particularly of such early Chou period inscriptions as ins. 127.1. This material has not been investigated as thoroughly as it deserves; it is genuine beyond any shadow of doubt, yet recent studies of Shang are for the most part concerned only with the unattested bone texts which offer all kinds of exciting information regarding Shang life and institutions. It has been correctly remarked that 'scarcely one or two people have quoted the texts' excavated at Anyang by the old Academia Sinica (mainland edition of Y.C.W.T.I. Catalogue, postscript on last page).

The investigation indicates, we believe, that the existence and the extent of spurious documents amongst the
unattested bronze inscriptions is a matter of particular concern, and in the preceding pages considerable evidence of the minimum extent of forgery amongst the bronze texts of Western Chou has been presented. The discovery of the fraudulence of such highly revered inscribed bronzes as the Mao Kung Ting, the Ta Yü Ting, the San Shih P'an, etc. is sufficient evidence in itself that the entire body of unattested bronze texts must now be regarded with suspicion; that numerous Chinese connoisseurs and scholars, and a few Western students, have been duped is surely a most disconcerting state of affairs and a fact whose significance can only point in one direction: the urgent necessity of a thorough and complete re-study of the documents. In this paper the first systematic attempt to deal with the problems involved on a wide enough scale to achieve acceptable results is roughly drafted, and the methods of research that must be brought to bear illustrated in a general way. The field is too vast, however, to allow a complete and painstaking investigation to be successfully concluded within the short period of two years, but the results of the survey as far as it has progressed seem to indicate beyond any reasonable doubt that research along the present lines must be continued and completed before the bronze documents are again consulted as historical sources.

The first approach of sorting the mass of documents into two major groups - attested and unattested - was the result of
our discovery of the principle of constancy of character structures; the discovery of this feature of the archaic script was accidental and was based in the first instance upon an examination of the structures of the elements in several characters of the Mao Kung Ting inscription as a check against an archaic form in some other inscription - inconstancy was observed, suspected, and immediately investigated with special reference to properly attested documents of various kinds that were available at the time. This was a short step towards the thorough application of this elementary research discipline to all relevant aspects of the study. Hitherto, scholars had never found it a necessary approach, but had been content merely to accept the inscriptions rather than to entertain thoughts of doubt concerning them.

The principle of constancy is the basis of the survey and its establishment and its application towards the determination of spurious archaic script has occupied a considerable portion of the time engaged in active research; it has been an effort well spent for at least 50 different Western Chou style inscription texts (spread amongst 90 different inscribed objects) are now definitely classifiable as forgeries. If it should be considered legitimate to apply the principle further to cases of vessel-lid texts exhibiting inconstancy (criterion 'C') the total of faked inscriptions would amount to more than
250 items. Series made by the same individuals manifesting inconstancy throughout the inscriptions would considerably augment the numbers. We do not wish, at this stage, however, to press the principle of constancy too far, but rather to remain content in asserting the individual cases noted in Sections Two and Three to be spurious. In our major work the matter will be considered at greater length.

The reversed sun-tzu phrase seems similarly acceptable as proof of forgery, and the fact that a high proportion of the cases exhibit inconstancy and nearly all contain suspect features entirely absent in the attested inscriptions, is possibly sufficient commentary on its reliability as a criterion of forgery.

Three groups of spurious inscriptions determined by unrelated methods and on the basis of isolated characteristics each provide tables of common suspect features. The group of accepted forgeries (faked copies of pre-existing texts being omitted) forms a sort of control because all the inscriptions incorporated are already accepted as spurious; faked copies of earlier recorded texts often exhibit upon analysis a similar series of suspect characteristics. Thus four groups of unattested materials determined as fakes by other scholars as well as by us dress tables of suspect features common throughout the inscriptions concerned. The combinations of particular features vary from one inscription to another - this is to be
expected for the inscribed vessels were not all produced by the same artisan or factory. Fully attested inscriptions, on the other hand, are practically devoid of the suspect features analysed in the unattested inscription groups; unfortunately, they amount to too small a body to permit final assessment of the validity of the items as criteria of forgery just yet. The significant absence of the suspect items in attested materials strongly suggests that future discoveries will also lack the majority of them; such is the opinion one must arrive at upon studying the inscriptions in accordance with the disciplines of research established in this paper. Its justification must, however, await the arrival of more archaeological evidence.

When we investigate earlier attempts to determine the nature and the extent of forgery amongst the bronze inscriptions, a surprisingly small amount of research in this direction is found. The approach is emotional and haphazard; it is seldom objective or systematic. Although some important criteria have been developed, they are necessarily of limited value and have never been fully or efficiently applied. The modern Western historian who is not particularly interested in the aesthetic value of his documents, but is deeply concerned with their reliability as historical sources, cannot but look askance at materials with so vague a record and authenticated by research techniques which are essentially primitive and often
untenable.

No attempt will be made here to assess the full extent of forgeries amongst the unattested materials; the Major Table shows perfectly well that the percentage of spurious bronze texts can hardly be expected to be a small one. In the preceding Section it was observed that few of the attested inscriptions illustrated contents and phraseology comparable with those of the general body of texts; again the control is slender but its significance may well be substantiated soon. As more fully attested inscriptions become available it may be found that their very contents and phrases alone (without recourse being made to the script) will settle the fate of many unattested marginal cases. The month-quarter terms, for instance, (see Appendix A) already point to interesting possibilities.

As to the extent of forgery, therefore, it is fitting in a preliminary investigation of this kind to regard the study as a pioneer work which has simply opened a highly necessary trail of research. The trail is one that no serious student can by-pass, and when it is further blazed with the light of increasing archaeological discovery, the nature of the ground covered will become more clearly apparent.
TABLE No. 7.

Major Table of Analyses Completed to Date.

This Table is, in effect, a summary of research accomplished up to now and entered in considerable detail on index cards for convenient comparison as further inscriptions became available. As it stands, the Table is useful as a general reference of suspect characteristics in individual bronze texts, but it is necessary to consult reproductions of the inscriptions concerned when comparing new materials exhibiting any of the suspect features analysed in this survey. It is thus a guide in respect to the features we have noted in each inscription and have recorded in detail on cards. The reader employing the Table will know what features to look for when consulting the inscriptions listed.

Asterisks * before the serial numbers denote the inscriptions to be spurious copies made in Sung times; red circles ● indicate the inscription concerned to be faked - an opinion of other scholars; a red square □ precedes serial numbers of recently discovered (but unacceptably attested) inscriptions; serial numbers underlined indicate what we believe to be cases of spurious copying.
### TABLE No. 7

**Major Table of Analyses Completed to Date.**

#### A. Sung Catalogue Inscriptions

<table>
<thead>
<tr>
<th>No.</th>
<th>Serial No.</th>
<th>Inscription</th>
<th>Manner</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>S. 222.1</td>
<td>A B E</td>
<td>J K L N</td>
<td>S2.</td>
</tr>
<tr>
<td>2.</td>
<td>S. 204.1</td>
<td>A B E F</td>
<td>K M N</td>
<td>S3.</td>
</tr>
<tr>
<td>3.</td>
<td>S. 156.1</td>
<td>A B E</td>
<td>K N O</td>
<td>S3.</td>
</tr>
<tr>
<td>4.</td>
<td>S. 151.1</td>
<td>a B E F</td>
<td>K M O</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>S. 131.1</td>
<td></td>
<td>R</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>S. 120.1</td>
<td>(v.a) a b D F</td>
<td>J K M</td>
<td>Q</td>
</tr>
<tr>
<td>7.</td>
<td>S. 120.1</td>
<td>(v.b) a b D E F</td>
<td>J K M</td>
<td>Q</td>
</tr>
<tr>
<td>8.</td>
<td>S. 120.1</td>
<td>(v.c) a b D E F</td>
<td>J K M</td>
<td>Q</td>
</tr>
<tr>
<td>9.</td>
<td>S. 120.1</td>
<td>(v.d) a b D E F</td>
<td>J K M</td>
<td>Q</td>
</tr>
<tr>
<td>10.</td>
<td>S. 110.2</td>
<td>(v.a) a B E F G</td>
<td>J K L N</td>
<td>S1.</td>
</tr>
<tr>
<td>11.</td>
<td>S. 110.2</td>
<td>(v.b) b D E F G</td>
<td>J K L N</td>
<td>S1.  U X</td>
</tr>
<tr>
<td>12.</td>
<td>S. 110.2</td>
<td>(v.c) b D E F G</td>
<td>J K L N</td>
<td>S1.  U X</td>
</tr>
<tr>
<td>15.</td>
<td>S. 104.1</td>
<td>(1.a) A C D E</td>
<td>M</td>
<td>S1.</td>
</tr>
<tr>
<td>16.</td>
<td>S. 104.1</td>
<td>(v.b) a D E</td>
<td>M</td>
<td>S1.  U X</td>
</tr>
<tr>
<td>17.</td>
<td>S. 104.1</td>
<td>(v.c) A D E</td>
<td>M</td>
<td>S1.  U X</td>
</tr>
<tr>
<td>19.</td>
<td>S. 101.2</td>
<td>(v.a) b D E</td>
<td>N</td>
<td>S3.</td>
</tr>
<tr>
<td>20.</td>
<td>S. 101.2</td>
<td>(v.b) b D E</td>
<td>N</td>
<td>S3.  U</td>
</tr>
<tr>
<td>22.</td>
<td>S. 101.2</td>
<td>(v.d) B D E F G</td>
<td>N F</td>
<td>S3.  U</td>
</tr>
<tr>
<td>23.</td>
<td>S. 100.1</td>
<td></td>
<td>J M</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>S. 71.1</td>
<td></td>
<td>J M</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>S. 70.2</td>
<td>(v.a) b c D F</td>
<td>I</td>
<td>M N O</td>
</tr>
<tr>
<td>26.</td>
<td>S. 70.2</td>
<td>(v.b) b c D F</td>
<td>I</td>
<td>M N</td>
</tr>
<tr>
<td>27.</td>
<td>S. 70.2</td>
<td>(v.c) b c D F</td>
<td>I</td>
<td>M N</td>
</tr>
<tr>
<td>28.</td>
<td>S. 70.2</td>
<td>(v.d) b c D F</td>
<td>I</td>
<td>M N</td>
</tr>
<tr>
<td>29.</td>
<td>S. 65.2</td>
<td>(v.a) A b D E g</td>
<td>J</td>
<td>M N</td>
</tr>
<tr>
<td>30.</td>
<td>S. 65.2</td>
<td>(v.b) A b D E g</td>
<td>J</td>
<td>M N</td>
</tr>
<tr>
<td>31.</td>
<td>S. 65.2</td>
<td>(v.c) A b D E g</td>
<td>J</td>
<td>M N</td>
</tr>
<tr>
<td>32.</td>
<td>S. 63.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>S. 60.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>34.</td>
<td>S. 56.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>35.</td>
<td>S. 55.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>36.</td>
<td>S. 51.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>37.</td>
<td>S. 48.6</td>
<td>(v.a) A E K M</td>
<td></td>
<td>S2.</td>
</tr>
<tr>
<td>38.</td>
<td>S. 48.6</td>
<td>(v.b) A E J K M</td>
<td></td>
<td>S1.</td>
</tr>
<tr>
<td>39.</td>
<td>S. 47.3</td>
<td>(v.a) b D J K M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>40.</td>
<td>S. 47.3</td>
<td>(v.b) b D J K M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>41.</td>
<td>S. 47.3</td>
<td>(v.c) B D J K M</td>
<td></td>
<td></td>
</tr>
<tr>
<td>42.</td>
<td>S. 46.3</td>
<td>(v.d) b E M N</td>
<td></td>
<td>S2.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>93.</td>
<td>S. 25.4</td>
<td>b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>94.</td>
<td>S. 25.15</td>
<td>b</td>
<td></td>
<td></td>
</tr>
<tr>
<td>95.</td>
<td>S. 24.11 (v)</td>
<td>b C</td>
<td>E</td>
<td>G</td>
</tr>
<tr>
<td>96.</td>
<td>S. 24.11 (1)</td>
<td>b C</td>
<td>E</td>
<td>G</td>
</tr>
<tr>
<td>97.</td>
<td>S. 23.3 (v,a)</td>
<td>b C</td>
<td>E</td>
<td>G</td>
</tr>
<tr>
<td>98.</td>
<td>S. 23.3 (v,b)</td>
<td>E</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>99.</td>
<td>S. 20.8</td>
<td>F</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>100.</td>
<td>S. 19.6 (v,a)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>101.</td>
<td>S. 19.6 (v,b)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>102.</td>
<td>S. 18.3</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>103.</td>
<td>S. 14.5 (v,a)</td>
<td>E</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>104.</td>
<td>S. 14.5 (v,b)</td>
<td>E</td>
<td></td>
<td>N</td>
</tr>
<tr>
<td>105.</td>
<td>S. 12.6 (v)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>106.</td>
<td>S. 12.6 (1)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>107.</td>
<td>S. 7.1 (v,a)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>108.</td>
<td>S. 7.1 (v,b)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>109.</td>
<td>S. 7.1 (v,c)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>110.</td>
<td>S. 7.1 (v,d)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>111.</td>
<td>S. 7.1 (v,e)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>112.</td>
<td>S. 7.1 (v,f)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>113.</td>
<td>S. 7.1 (v,g)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>114.</td>
<td>S. 7.1 (v,h)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>115.</td>
<td>S. 7.1 (v,i)</td>
<td>E</td>
<td></td>
<td></td>
</tr>
<tr>
<td>116.</td>
<td>S. 7.1 (v,j)</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
<tr>
<td>117.</td>
<td>S. 7.1 (v,k)</td>
<td>E</td>
<td>F</td>
<td>G</td>
</tr>
</tbody>
</table>
### Early Ch'ing Catalogue Inscriptions

<table>
<thead>
<tr>
<th>No.</th>
<th>Catalogue</th>
<th>Inscription</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>118</td>
<td>T.500.1</td>
<td>A B E G I J K L M N</td>
<td></td>
</tr>
<tr>
<td>119</td>
<td>T.395.1</td>
<td>a b E H I J K</td>
<td>S13</td>
</tr>
<tr>
<td>120</td>
<td>T.349.1 (v,a)</td>
<td>A B E F G I K</td>
<td></td>
</tr>
<tr>
<td>121</td>
<td>T.349.1 (v,b)</td>
<td>A B E F G I K</td>
<td></td>
</tr>
<tr>
<td>122</td>
<td>T.349.1 (v,c)</td>
<td>A B E F G I K</td>
<td></td>
</tr>
<tr>
<td>123</td>
<td>T.285.1</td>
<td>A B E G J K M</td>
<td></td>
</tr>
<tr>
<td>124</td>
<td>T.195.1</td>
<td>A B E H I J K M</td>
<td>S1</td>
</tr>
<tr>
<td>125</td>
<td>T.162.1</td>
<td>A B D E H I</td>
<td>Q</td>
</tr>
<tr>
<td>126</td>
<td>T.149.1 (1.a)</td>
<td>B D E J K</td>
<td>S4</td>
</tr>
<tr>
<td>127</td>
<td>T.149.1 (v,b)</td>
<td>B D E J K</td>
<td>S4</td>
</tr>
<tr>
<td>128</td>
<td>T.149.1 (1.b)</td>
<td>B D E J K</td>
<td>S4</td>
</tr>
<tr>
<td>129</td>
<td>T.149.1 (v,c)</td>
<td>D J K</td>
<td>S4</td>
</tr>
<tr>
<td>130</td>
<td>T.149.1 (v.d)</td>
<td>B D E J K</td>
<td>S4</td>
</tr>
<tr>
<td>131</td>
<td>T.149.1 (v.e)</td>
<td>B D E F J K</td>
<td>S4</td>
</tr>
<tr>
<td>132</td>
<td>T.149.1 (v.f)</td>
<td>D J K</td>
<td>S4</td>
</tr>
<tr>
<td>133</td>
<td>T.149.1 (v.g)</td>
<td>D J K</td>
<td>S4</td>
</tr>
<tr>
<td>134</td>
<td>T.149.1 (1.g)</td>
<td>B D E F J K</td>
<td>S4</td>
</tr>
<tr>
<td>135</td>
<td>T.149.1 (v.h)</td>
<td>D J K</td>
<td>S4</td>
</tr>
<tr>
<td>136</td>
<td>T.149.1 (1.h)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>137</td>
<td>T.149.1 (v.i)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>138</td>
<td>T.149.1 (1.i)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>139</td>
<td>T.149.1 (v.j)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>140</td>
<td>T.149.1 (1.j)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>141</td>
<td>T.149.1 (v.k)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>142</td>
<td>T.149.1 (1.k)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>143</td>
<td>T.149.1 (1.l)</td>
<td>B D E G J K</td>
<td>S4</td>
</tr>
<tr>
<td>144</td>
<td>T.144.1 (v,b)</td>
<td>B D E F J K L M</td>
<td>S2</td>
</tr>
<tr>
<td>145</td>
<td>T.144.1 (v.b)</td>
<td>b D E F J K L M</td>
<td>S2</td>
</tr>
<tr>
<td>146</td>
<td>T.115.1 (v,a)</td>
<td>B C D E M N</td>
<td>S2</td>
</tr>
<tr>
<td>147</td>
<td>T.115.1 (1.e)</td>
<td>B C D E M N O Q</td>
<td>U X</td>
</tr>
<tr>
<td>148</td>
<td>T.115.1 (v.b)</td>
<td>B C D E M N O P U X</td>
<td></td>
</tr>
<tr>
<td>149</td>
<td>T.112.1</td>
<td>b E J M</td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>T.104.6 (v.a)</td>
<td>c d J K</td>
<td></td>
</tr>
<tr>
<td>151</td>
<td>T.104.6 (1.a)</td>
<td>c d F J K</td>
<td></td>
</tr>
<tr>
<td>152</td>
<td>T.104.6 (v.b)</td>
<td>c d F J K</td>
<td></td>
</tr>
<tr>
<td>153</td>
<td>T.104.6 (v.c)</td>
<td>c d F J K</td>
<td></td>
</tr>
<tr>
<td>154</td>
<td>T.104.6 (1.c)</td>
<td>c d J K</td>
<td></td>
</tr>
<tr>
<td>155</td>
<td>T.104.6 (v.d)</td>
<td>c d J K</td>
<td></td>
</tr>
<tr>
<td>156</td>
<td>T.104.6 (1.d)</td>
<td>c d J K</td>
<td></td>
</tr>
<tr>
<td>157</td>
<td>T.104.4</td>
<td>E J K M</td>
<td>S1</td>
</tr>
<tr>
<td>158</td>
<td>T.104.3 (v.a)</td>
<td>b D E F M</td>
<td>S2</td>
</tr>
<tr>
<td>159</td>
<td>T.104.3 (v.b)</td>
<td>A B C D E F M</td>
<td>S2 U</td>
</tr>
<tr>
<td>160</td>
<td>T.104.3 (1.b)</td>
<td>A B C D E F</td>
<td>M N O P</td>
</tr>
<tr>
<td>161</td>
<td>T.103.1</td>
<td>A E F J K M</td>
<td></td>
</tr>
<tr>
<td>162</td>
<td>T.101.2</td>
<td>(listed with Sung Catalogue prototype, S.100.2 (v.a)</td>
<td></td>
</tr>
<tr>
<td>163</td>
<td>T.101.1</td>
<td>E F J K</td>
<td>S1</td>
</tr>
<tr>
<td>164</td>
<td>T.100.3</td>
<td>A B</td>
<td>S2</td>
</tr>
<tr>
<td>165</td>
<td>T.97.1</td>
<td>B E G</td>
<td>S1</td>
</tr>
<tr>
<td>No.</td>
<td>Description</td>
<td>Characters</td>
<td>Colors</td>
</tr>
<tr>
<td>-----</td>
<td>------------------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>267</td>
<td>T.27.10 (v.a)</td>
<td>b, d E</td>
<td></td>
</tr>
<tr>
<td>268</td>
<td>T.27.10 (v.b)</td>
<td>b, d E</td>
<td></td>
</tr>
<tr>
<td>269</td>
<td>T.27.10 (v.c)</td>
<td>d E</td>
<td></td>
</tr>
<tr>
<td>270</td>
<td>T.27.10 (v.d)</td>
<td>d E</td>
<td></td>
</tr>
<tr>
<td>271</td>
<td>T.25.17</td>
<td>A, B, E</td>
<td></td>
</tr>
<tr>
<td>272</td>
<td>T.25.12 (v.a)</td>
<td>A, D E</td>
<td></td>
</tr>
<tr>
<td>273</td>
<td>T.25.12 (v.b)</td>
<td>A, D E</td>
<td></td>
</tr>
<tr>
<td>274</td>
<td>T.25.12 (v.c)</td>
<td>A, D E</td>
<td></td>
</tr>
<tr>
<td>275</td>
<td>T.25.12 (v.d)</td>
<td>A, D E</td>
<td></td>
</tr>
<tr>
<td>276</td>
<td>T.25.12 (v.e)</td>
<td>A, D E</td>
<td></td>
</tr>
<tr>
<td>277</td>
<td>T.25.12 (v.f)</td>
<td>A, D E</td>
<td></td>
</tr>
<tr>
<td>278</td>
<td>T.25.9 (v.a)</td>
<td>D, G</td>
<td></td>
</tr>
<tr>
<td>279</td>
<td>T.25.9 (v.b)</td>
<td>D, G</td>
<td></td>
</tr>
<tr>
<td>280</td>
<td>T.25.9 (v.c)</td>
<td>D, E F G</td>
<td></td>
</tr>
<tr>
<td>281</td>
<td>T.25.9 (v.d)</td>
<td>d</td>
<td></td>
</tr>
<tr>
<td>282</td>
<td>T.25.10</td>
<td>G</td>
<td></td>
</tr>
<tr>
<td>283</td>
<td>T.24.9</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>284</td>
<td>T.24.8</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>285</td>
<td>T.24.6</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>286</td>
<td>T.24.5</td>
<td>E, J</td>
<td></td>
</tr>
<tr>
<td>287</td>
<td>T.23.19 (v.a)</td>
<td>b, E, G</td>
<td></td>
</tr>
<tr>
<td>288</td>
<td>T.23.19 (v.b)</td>
<td>E, G</td>
<td></td>
</tr>
<tr>
<td>289</td>
<td>T.23.19 (v.c)</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>290</td>
<td>T.23.15 (v.a)</td>
<td>b, C, D E</td>
<td></td>
</tr>
<tr>
<td>291</td>
<td>T.23.15 (1.a)</td>
<td>b, C, D E</td>
<td></td>
</tr>
<tr>
<td>292</td>
<td>T.23.15 (1.b)</td>
<td>b, C, D E</td>
<td></td>
</tr>
<tr>
<td>293</td>
<td>T.23.12</td>
<td>b, E</td>
<td></td>
</tr>
<tr>
<td>294</td>
<td>T.23.10</td>
<td>E, G</td>
<td></td>
</tr>
<tr>
<td>295</td>
<td>T.23.8</td>
<td>E, F G</td>
<td></td>
</tr>
<tr>
<td>296</td>
<td>T.23.4</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>297</td>
<td>T.23.2</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>300</td>
<td>T.21.20 (v)</td>
<td>d</td>
<td></td>
</tr>
<tr>
<td>301</td>
<td>T.21.16 (v.a)</td>
<td>D, G</td>
<td></td>
</tr>
<tr>
<td>302</td>
<td>T.21.16 (1.a)</td>
<td>D, G</td>
<td></td>
</tr>
<tr>
<td>303</td>
<td>T.21.16 (v.b)</td>
<td>D, E</td>
<td></td>
</tr>
<tr>
<td>304</td>
<td>T.21.15 (v.e)</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>305</td>
<td>T.21.15 (v.b)</td>
<td>D, E F</td>
<td></td>
</tr>
<tr>
<td>306</td>
<td>T.21.15 (v.e)</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>307</td>
<td>T.21.14 (v.e)</td>
<td>D</td>
<td></td>
</tr>
<tr>
<td>308</td>
<td>T.21.14 (v.b)</td>
<td>D, E</td>
<td></td>
</tr>
<tr>
<td>309</td>
<td>T.21.12 (v.a)</td>
<td>C, D E F G</td>
<td></td>
</tr>
<tr>
<td>310</td>
<td>T.21.12 (1.a)</td>
<td>C, D E F G</td>
<td></td>
</tr>
<tr>
<td>311</td>
<td>T.21.12 (v.b)</td>
<td>C, D E F G</td>
<td></td>
</tr>
<tr>
<td>312</td>
<td>T.21.12 (1.b)</td>
<td>C, D E F G</td>
<td></td>
</tr>
<tr>
<td>313</td>
<td>T.21.12 (v.e)</td>
<td>C, D E F G</td>
<td></td>
</tr>
<tr>
<td>314</td>
<td>T.21.11</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>315</td>
<td>T.21.10 (v.a)</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>316</td>
<td>T.21.10 (v.b)</td>
<td>E</td>
<td></td>
</tr>
<tr>
<td>317</td>
<td>T.21.9 (v.a)</td>
<td>C, D E F</td>
<td></td>
</tr>
<tr>
<td>316. T.21.9 (1.a)</td>
<td>CDEFGH</td>
<td>N*</td>
<td>N*</td>
</tr>
<tr>
<td>319. T.21.9 (v.b)</td>
<td>DEFGH</td>
<td>N*</td>
<td>N*</td>
</tr>
<tr>
<td>320. T.21.9 (1.b)</td>
<td>DEFGH</td>
<td>N*</td>
<td>N*</td>
</tr>
<tr>
<td>321. T.21.9 (v.c)</td>
<td>CDEFGH</td>
<td>N*</td>
<td>Q</td>
</tr>
<tr>
<td>322. T.21.9 (1.c)</td>
<td>CDEFGH</td>
<td>N*</td>
<td>Q</td>
</tr>
<tr>
<td>323. T.21.9 (v.d)</td>
<td>CDEFGH</td>
<td>N*</td>
<td>Q</td>
</tr>
<tr>
<td>324. T.21.9 (1.d)</td>
<td>CDEFGH</td>
<td>N*</td>
<td>Q</td>
</tr>
<tr>
<td>325. T.21.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>326. T.21.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>327. T.20.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>328. T.20.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>329. T.19.4 (v.a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>330. T.19.4 (v.b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>331. T.18.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>332. T.17.1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>333. T.16.10 (v)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>334. T.16.10 (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>335. T.16.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>336. T.16.2 (v,a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>337. T.16.2 (v.b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>338. T.15.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>339. T.15.8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>340. T.14.16</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>341. T.14.11 (v)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>342. T.14.11 (1)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>343. T.14.10 (1.a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>344. T.14.10 (1.b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>345. T.14.9</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>346. T.14.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>347. T.14.3</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>348. T.14.1 (v.e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>349. T.14.1 (v.b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>350. T.14.1 (v.c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>351. T.14.1 (v.d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>352. T.14.1 (v.e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>353. T.14.1 (v.f)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>354. T.14.1 (v.g)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>355. T.14.1 (v.h)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>356. T.13.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>357. T.13.5 (v.a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>358. T.13.5 (1.a)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>359. T.13.5 (v.b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>360. T.13.5 (1.b)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>361. T.13.5 (v.c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>362. T.13.5 (1.c)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>363. T.13.5 (v.d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>364. T.13.5 (1.d)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>365. T.13.5 (v.e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>366. T.13.5 (1.e)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>367. T.13.5 (v.f)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>368. T.13.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>369. T.13.3 (v.a)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### C. Late Ch'ing and Recent Catalogues

<p>| 419 | 538.1 | B...E...J...LM... | 420 | 280.1 | A...B...M... | 421 | 260.1 (v.a) | A...B...dEFG...JKLM... | 422 | 260.1 (v.b) | A...B...dEFG...JKLM... | 423 | 187.1 (v.a) | A...c...d...E...JKM... | 424 | 187.1 (1.a) | B...c...d...JKM... | 425 | 187.1 (v.b) | A...d...E...JKM... | 426 | 149.2 | A...B...EFG...JKM... | 427 | 143.1 | A...B...EFG...JM... | 428 | 141.1 | A...B...EFG...JKM... | 429 | 138.1 | A...B...EFG...JM... | 430 | 133.1 | A...B...EFG...JM... | 431 | 131.2 | A...B...EFG...JKM... | 432 | 129.1 | A...B...EFG...JKM... | 433 | 123.1 (v.a) | A...B...EFG...JKM... | 434 | 123.1 (v.b) | A...B...EFG...JKM... | 435 | 123.1 (v.c) | A...B...EFG...JKM... | 436 | 121.2 | A...B...EFG...JKM... | 437 | 121.1 (v.a) | A...B...EFG...JKM... | 438 | 121.1 (1.a) | A...B...EFG...JKM... | 439 | 121.1 (v.b) | A...B...EFG...JKM... | 440 | 121.1 (1.b) | A...B...EFG...JKM... | 441 | 113.1 | A...B...EFG...JKM... | 442 | 110.3 | A...B...EFG...JKM... | 443 | 110.1 | A...B...EFG...JKM... | 444 | 107.1 | A...B...EFG...JKM... | 445 | 106.1 (v.a) | A...B...EFG...JKM... | 446 | 106.1 (v.b) | A...B...EFG...JKM... | 447 | 104.5 (v.a) | A...B...EFG...JKM... | 448 | 104.5 (v.b) | A...B...EFG...JKM... | 449 | 104.2 | A...B...EFG...JKM... | 450 | 102.1 | A...B...EFG...JKM... | 451 | 100.6 (v) | A...B...EFG...JKM... | 452 | 100.6 (1) | A...B...EFG...JKM... | 453 | 100.5 (v) | A...B...EFG...JKM... | 454 | 100.5 (1) | A...B...EFG...JKM... | 455 | 100.4 | A...B...EFG...JKM... | 456 | 99.1 | A...B...EFG...JKM... | 457 | 92.1 | A...B...EFG...JKM... | 458 | 90.1 | A...B...EFG...JKM... | 459 | 89.2 (v.a) | A...B...EFG...JKM... | 460 | 89.2 (1.a) | A...B...EFG...JKM... | 461 | 89.2 (v.b) | A...B...EFG...JKM... | 462 | 89.2 (1.a) | A...B...EFG...JKM... | 463 | 88.2 | A...B...EFG...JKM... | 464 | 87.3 | A...B...EFG...JKM... | 465 | 84.2 | A...B...EFG...JKM... | 466 | 83.1 | A...B...EFG...JKM... | 467 | 81.2 (v.a) | A...B...EFG...JKM... |
| 488 | 61.2 (v,b) |  EFG   | JKM   |      |      |      |  |  |  |  |
| 489 | 61.1      |        |       |      |      |      |  |  |  |  |
| 490 | 79.1 (v,a) |        |       |      |      |      |  |  |  |  |
| 491 | 79.1 (v,b) |        |       |      |      |      |  |  |  |  |
| 492 | 79.1 (v,c) |        |       |      |      |      |  |  |  |  |
| 493 | 79.1 (v,d) |        |       |      |      |      |  |  |  |  |
| 494 | 79.1 (v,e) |        |       |      |      |      |  |  |  |  |
| 495 | 79.1 (v,f) |        |       |      |      |      |  |  |  |  |
| 496 | 79.1 (v,g) |        |       |      |      |      |  |  |  |  |
| 497 | 78.3      | B      |       |      |      |      |  |  |  |  |
| 498 | 78.3      |        |       |      |      |      |  |  |  |  |
| 499 | 78.3      |        |       |      |      |      |  |  |  |  |
| 500 | 78.3      |        |       |      |      |      |  |  |  |  |
| 501 | 78.3      |        |       |      |      |      |  |  |  |  |
| 502 | 78.3      |        |       |      |      |      |  |  |  |  |
| 503 | 78.3      |        |       |      |      |      |  |  |  |  |
| 504 | 78.3      |        |       |      |      |      |  |  |  |  |
| 505 | 78.3      |        |       |      |      |      |  |  |  |  |
| 506 | 78.3      |        |       |      |      |      |  |  |  |  |
| 507 | 78.3      |        |       |      |      |      |  |  |  |  |
| 508 | 78.3      |        |       |      |      |      |  |  |  |  |
| 509 | 78.3      |        |       |      |      |      |  |  |  |  |
| 510 | 78.3      |        |       |      |      |      |  |  |  |  |
| 511 | 78.3      |        |       |      |      |      |  |  |  |  |
| 512 | 78.3      |        |       |      |      |      |  |  |  |  |
| 513 | 78.3      |        |       |      |      |      |  |  |  |  |
| 514 | 78.3      |        |       |      |      |      |  |  |  |  |
| 515 | 78.3      |        |       |      |      |      |  |  |  |  |
| 516 | 78.3      |        |       |      |      |      |  |  |  |  |
| 517 | 78.3      |        |       |      |      |      |  |  |  |  |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Value</th>
<th>(v.a)</th>
<th>(v.b)</th>
<th>(v.c)</th>
<th>(v.d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>569</td>
<td>41.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>570</td>
<td>40.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>571</td>
<td>40.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>572</td>
<td>40.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>573</td>
<td>40.2</td>
<td>40.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>574</td>
<td>40.2</td>
<td>40.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>575</td>
<td>40.2</td>
<td>40.2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>576</td>
<td>40.2</td>
<td></td>
<td>(rubbing not available)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>577</td>
<td>40.2</td>
<td></td>
<td>(rubbing not available)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>578</td>
<td>39.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>579</td>
<td>38.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>580</td>
<td>38.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>581</td>
<td>37.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>582</td>
<td>37.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>583</td>
<td>37.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>584</td>
<td>37.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>585</td>
<td>37.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>586</td>
<td>37.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>587</td>
<td>36.8</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>588</td>
<td>36.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>589</td>
<td>36.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>590</td>
<td>35.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>591</td>
<td>35.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>592</td>
<td>35.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>593</td>
<td>34.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>594</td>
<td>34.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>595</td>
<td>34.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>596</td>
<td>34.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>597</td>
<td>33.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>598</td>
<td>32.7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>599</td>
<td>32.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>600</td>
<td>32.6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>601</td>
<td>32.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>602</td>
<td>32.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>603</td>
<td>32.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>604</td>
<td>32.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>605</td>
<td>32.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>606</td>
<td>32.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>607</td>
<td>32.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>608</td>
<td>32.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>609</td>
<td>32.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>610</td>
<td>31.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>611</td>
<td>31.4</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>612</td>
<td>31.3</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>613</td>
<td>31.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>614</td>
<td>31.2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>615</td>
<td>31.1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>616</td>
<td>30.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>617</td>
<td>30.15</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>618</td>
<td>30.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>619</td>
<td>30.10</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No.</td>
<td>Thickness</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>729</td>
<td>19.1 (v)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>730</td>
<td>19.1 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>731</td>
<td>19.1 (v)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>732</td>
<td>19.1 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>733</td>
<td>19.1 (v)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>734</td>
<td>19.1 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>735</td>
<td>19.1 (v)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>736</td>
<td>19.1 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>737</td>
<td>19.1 (v)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>738</td>
<td>19.1 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>739</td>
<td>19.1 (v)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>740</td>
<td>19.1 (1)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*heavily patinated*
|   | 16.12 (v.a) | 16.12 (v.b) | 16.9 | 16.7 | 16.6 (v) | 16.6 (1) | 16.5 | 16.4 | 16.3 | 16.1 | P 15.10 | 15.7 | 15.6 (v) | 15.6 (1) | 15.5 | 15.4 | 15.3 | 15.2 (v.a) | 15.2 (v.b) | P 14.22 | 14.20 | 14.19 | 14.18 | 14.15 | 14.14 (v.a) | 14.14 (1.a) | 14.14 (v.b) | 14.14 (1.b) | 14.8 (v) | 14.8 (1) | 14.7 (v.a) | 14.7 (1.a) | 14.7 (v.b) | 14.6 | 14.5 | 14.2 (v.a) | 14.2 (1.a) | 14.2 (v.b) | 14.2 (1.b) | 14.2 (v.c) | 14.2 (1.c) | 13.14 | 13.10 | 13.9 | 13.2 | 13.1 | 12.28 (v.a) | 12.28 (v.b) | 12.26 | 12.17 | 12.14 | 12.13 | 12.12 |
|---|-------------|-------------|------|------|----------|----------|------|------|------|------|----------|------|----------|----------|------|------|------|-----------------|-----------------|----------|------|------|------|-----------------|-----------------|----------|------|------|------|-----------------|-----------------|----------|------|------|------|-----------------|-----------------|----------|------|------|------|
APPENDIX

A.
漢書 許林。律志第二下：

惟一月壬辰。旁死魄...
證若來三月既死魄...
惟四月既旁生魄...

(1) 孟庚日。月二日以往月生魄。死。故言死魄。月賤也。師古日：魄古魄字同

(2) In some editions this is written as the second month.

書經。武成：

惟一月壬辰旁死魄...
四月哉生明....
越三日庚戌柴望既生魄...
既戌午...(!)

庚詼： 惟三月哉生魄...

召詼： 惟二月既望...

顧命： 惟四月哉生魄....

Fig. 42. Month quarters in the Shu ching and the Han shu quotation of lost passages of the forged Wu ch'eng chapter.
The Month Quarter.

In date formulations of the Chou period the month is divided into four quarters each approximately a week in length; they are termed ch'u-chi (the first quarter), chi-sheng-pa (the second quarter), chi-wang (the third quarter), and chi-ssu-pa (the fourth quarter). These terms are found in only two traditional sources: the Shih ching which has one case of the first quarter; the Shu ching which has several cases comprising the second, third, and fourth quarters. The formulations incorporating the month-quarters are appended opposite; the bulk of them, it will be observed, appear in the forged Wu Ch'eng chapter of the Shu which is quoted also in the Han shu exhibiting variations from the present Shu text. As the traditional sources indicate, the recording of the formulation of the month quarters has probably in several respects become corrupted. The Han shu extracts, for instance, employ the character which has been superseded by 霸 in the Shu text; there is also a lack of standardisation in the manner in which the terms are expressed, especially in the cases of the second and fourth quarters.

Unattested bronze texts (unless otherwise stated we refer specifically to Western style texts) present a simple and systematic method of formulation: ch'u-chi, chi-sheng-pa, chi-wang, and chi-ssu-pa. With only two exceptions (ins. S.156.1...
Fig. 43. Date formulations in authentic inscriptions.
and ins. T.77.2) the terms do not vary in respect to the characters used - variation in the writing of the characters themselves often occurs but always the same characters are employed.

In Western Chou inscription texts there are 70 cases of the first quarter, 28 of the second, 26 of the third, and 9 of the fourth; in catalogue groups the numbers are:

<table>
<thead>
<tr>
<th></th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sung Catalogues:</td>
<td>7</td>
<td>3</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Early Ch'ing Catalogues:</td>
<td>19</td>
<td>7</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>Recent Catalogues:</td>
<td>44</td>
<td>18</td>
<td>15</td>
<td>8</td>
</tr>
</tbody>
</table>

Eastern Chou style texts exhibit a preponderance of first quarter dates amongst which the combination of ch'u-chi-ting-hai is often found. Month-quarters do not appear at all in inscriptions of the Shang period; this system of dating seems to have originated in Chou times.

Date formulations in authentic inscriptions of Chou confirm the use of the first quarter throughout the period (see examples opposite); there is one instance of an Eastern Chou text incorporating the second quarter written as 既字日期, a combination unknown in the unattested inscriptions. Because of it, we put forward the suggestion that the chi-sheng-pa combination was not a Chou period term; it is merely a copy of the distorted phraseology of the Shu. Similarly, we believe the fourth quarter will be discovered later to have had
entirely different expression in Chou times. This opinion is
supported to some extent by the date formulations in attested
materials; nos. 4, 6, 7, 8, 10, and 11 manifest date phraseology that appears quite alien to the usual formulations amongst
unattested inscriptions. Obviously it is impossible at this
stage with only a handful of attested documents to press the
matter too far; however, the possibility that later excavated
inscribed bronzes will confirm the point must be kept in mind.

Further support of our suspicion of the authenticity of
the month-quarters as expressed in unattested inscriptions and
traditional texts is to be noted in the following table of
second, third, and fourth quarter occurrences in Western Chou
inscriptions recorded from Sung times to the present. Of the
65 cases (lid-texts and duplicated texts are omitted ) 3 are
regarded as spurious by other scholars; 19 are classifiable
as forgeries because of inconstancy; 8 contain the reversed
sun-tzu phrase. Thus nearly half of the texts are wholly un-
reliable materials; the remainder are well saturated with sus-
psect items.

It is possible that forgers in Sung times established the
month-quarters on the basis of Shu examples paying particular
attention to the Han shu quotations from the Wu Ch'eng chapter
which contains the largest assembly of month-quarters. Outside
this forged chapter there are two cases of the second quarter
written as 起 生魂 and one of the third quarter; the
chapters incorporating the two terms are generally regarded as authentic, thus the source consulted by the Sung forgers seems clearly to be the spurious chapter and the missing sections of it as quoted in the Han shu. The possibility that the foregoing comments are, at least in some measure, correct is also suggested by the following table - of the 6 Sung Catalogue occurrences, 3 exhibit inconstancy; of the 16 early Ch'ing Catalogue cases 8 exhibit inconstancy; so high a proportion of forgeries determinable on the basis of the one criterion does not augur well for the fate of the remaining cases. The earliest recorded inscriptions incorporating the second - fourth quarters, as a group, are to be strongly suspected.
**TABLE NO. 8**

Second, third, and fourth month quarters.

<table>
<thead>
<tr>
<th>S</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
<th>K</th>
<th>L</th>
<th>M</th>
<th>N</th>
<th>S2</th>
<th>S3</th>
</tr>
</thead>
<tbody>
<tr>
<td>222</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S2</td>
<td>S3</td>
</tr>
<tr>
<td>201</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S2</td>
<td>S3</td>
</tr>
<tr>
<td>156</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>100</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S2</td>
<td>S2</td>
</tr>
<tr>
<td>56</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S2</td>
<td>S2</td>
</tr>
<tr>
<td>46</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S2</td>
<td>S2</td>
</tr>
<tr>
<td>395</td>
<td>a</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S1,3</td>
<td>S2</td>
</tr>
<tr>
<td>149</td>
<td>B</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S2</td>
<td>S2</td>
<td>S2</td>
<td>S2</td>
</tr>
<tr>
<td>149</td>
<td>B</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S2</td>
<td>S2</td>
<td>S2</td>
<td>S2</td>
</tr>
<tr>
<td>104</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>101</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>92</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>92</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>84</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>72</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>56</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>44</td>
<td>A</td>
<td>B</td>
<td>C</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>36</td>
<td>b</td>
<td>D</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>30</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
</tr>
<tr>
<td>23</td>
<td>E</td>
<td>F</td>
<td>G</td>
<td>H</td>
<td>I</td>
<td>J</td>
<td>K</td>
<td>L</td>
<td>M</td>
<td>N</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
<td>S3</td>
</tr>
</tbody>
</table>

**Notes:**
- A, B, C, D, E, F, G, H, I, J, K, L, M, N represent different symbols or values.
- S2, S3, S4, S5 represent different groups or categories.
- The table seems to be a matrix of some kind, possibly indicating relationships or transformations.

**Explanation:**
- The table appears to be a complex matrix, possibly used in a specific context or field.
- Each row and column combination likely corresponds to specific values or data points.
- The use of uppercase letters (A, B, C, etc.) likely denotes different variables or categories.
- The numbers (222, 201, etc.) could represent identifier codes or versions.

**Contextual Analysis:** The table could be from a technical or scientific document, possibly detailing settings or configurations for different scenarios or outcomes.
APPENDIX

B.
Further Research.

On several occasions we have stated that certain topics will be dealt with in later papers and because of the impossi­bility of preparing the present paper in a properly digested form at this early stage of research so that it may be in an acceptable state for publication, we list hereunder a series of titles of papers which we hope to publish gradually as complete studies commencing early next year. Most of the subjects are dealt with in the present survey and the views expressed here will no doubt be modified in some cases, par­ticularly if newly excavated inscribed articles should arrive before the various papers are finally drafted.

1. The Principle of Constancy of Character Structures.

A modification of Section Two with considerable addition of illustrations of archaic script; the inscriptions which are determinable as forgeries on application of the criterion will be noted in somewhat greater detail.

2. A System of Serial Numbers to be Applied to Inscribed Archaic Bronzes and other Artifacts.

The long table of inscription locations at the conclusion of the Introduction is essentially the basis of this article. It will be evident that a form of serial numbers is urgently required in Chin Shih Hsueh but the presentation of a list of such numbers should be accompanied by reproductions of each inscrip­tion so that efficient standardisation of reference will be possible in all future writings. It will be most unlikely, however, that a work of this magnitude will find
support for publication; the Hsiao hsiao
Catalogue which we have recently purchased
and which should soon arrive from China
will replace the San tai Catalogue as the
bibliographical source and obviate refer­
ence to a number of other Recent Catalogues,
thus making the application of the system
of serial numbers comparatively easy.

3. The Reversed Sun-Tzu Phrase as a Criterion of Forgery.

Section Four will be modified somewhat and
only the more obviously faked inscriptions
will be dealt with in any detail.

4. Studies of Individual Inscriptions.

Both unattested and attested inscriptions
will be surveyed individually or in groups
such as the Ts'ai bronzes. Every character
will be considered individually as a pre­
lude to the formation of an archaic charac­
ter dictionary. The contents will be appraised
from an historical view-point. For the most
part, newly excavated inscriptions will re­
cieve priority as the subjects of study.

5. The Nature of Archaic Chinese Script in the Light of
Recent Discoveries.

This paper was completed some months ago but
now requires considerable re-writing in order
to incorporate much newly acquired material.

6. Date Formulations of Shang and Chou.

This will be an expansion of Appendix A to
be finally drafted when more relevant
material becomes available.


In the present survey very little support
has been given to the assertion that the
reproductions in these early catalogues are
reliable copies of the original inscriptions.
So much illustration would be required to
prove the point that we have decided to plan
a re-edition of the catalogues based on all available early printings; with proper indexing and careful editing the project will supply a long felt need as well as achieve the above aim.


The less serious side of our study is devoted to the collection of photographs of relevant objects in private and public collections in this part of the world to be compiled into the orthodox 'catalogue'. Up to now more than 80 items have been located and studied in some detail. It is intended to prepare a long introduction incorporating interesting material not hitherto employed in works of this kind.

9. Inscriptions of Shang and Chou.

Such is the tentative title of our major work which will take several years to compile and which will comprise many thousands of individual documents. Tung Tso-pin's Yin hsü wen tzu wai pien published a few months ago illustrates the general lay-out of Shang texts that will appear: a photograph of rubbing, a handcopy of the same, modern character transcription, translation and notes. Each inscription will be dealt with thus. Chou bronze inscriptions will be accompanied by photographs of the vessels and rubbings of the decor - the lay-out comparable with the Shih erh chia Catalogue. As stated in the Introduction, this major work is intended as a 'new Shu ching' and will contain both 'chin wen' and 'ku wen' chapters - i.e., both genuine and spurious inscriptions. Historians consulting the work will find the assembly of all available inscriptions in one publication a most convenient tool of research, especially as it will be thoroughly indexed and each inscription transcribed and translated.
BIBLIOGRAPHY
BIBLIOGRAPHY.

The system of arrangement is a provisional one; the Bibliography is divided into six major sections:

1. **Special Reference Works**: the dictionaries, indexes, bibliographies, etc. which the student in this field must consult constantly over and above the sinological tools normally used in other branches of Chinese studies; the latter are just as necessary in Chin Shih Hsueh, but we omit reference to them here.

2. **Catalogues of Bronze Inscriptions**: these are divided into four catalogue groups - Sung, early Ch'ing, late Ch'ing and Recent, and within each group the catalogues appear in chronological order; titles are given first. A fifth group comprises collections of original rubbings consulted.

3. **Catalogues of Oracle Bone Inscriptions**.

4. **General Works**: These, for the most part, are publications consulted for minor points during the period of writing; some are, of course, extremely important works amongst which Jung Keng's *Shang chou yi ch'i t'ung k'ao* must take the foremost position. Editions of classical texts referred to from time to time have not been recorded as they play so small a part in the survey.

The above four sections are devoted solely to Chinese and Japanese language publications.

5. **Western Publications**.

6. **Articles and Short Studies**: Both Western and Chinese writings are grouped together.

Owing to technical difficulties and to our determination that the bulk of the bibliographical information should appear in Chinese text - especially in the first three sections - it has
been found more convenient merely to reproduce photographically (reflex method) our handwritten manuscript of this portion of the Bibliography. Sources quoted in the last three sections seem reasonably clear without Chinese text; articles appear in a limited numbers of journals and may be found without difficulty - where an English title is given in the journal we employ this rather than a romanisation of the Chinese title; this seems preferable in the absence of characters - it is particularly convenient to the writer who is a Cantonese speaker and only slightly proficient in 'Mandarin'.

Chinese books are not counted in 'chuan' but in numbers of physical volumes; the word 'volume' is employed in the sense of 'tse' or 'pen'.

A list of the more prolific writers whose works are scattered amongst the divisions of the Bibliography together with locations of their publications is appended.

A list of abbreviated titles employed in the survey together with the full romanised title and a reference number to its location in the Bibliography is also appended.

The Bibliography incorporates sources actually employed or consulted during the period of research and writing; it has no pretensions of being a complete list of sources in this field or a final form of presentation of bibliographical information.
List of Prolific Writers.

<table>
<thead>
<tr>
<th>Ch'en Meng-chia:</th>
<th>187, 202, 203.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hopkins, L. C.:</td>
<td>185, 210, 211, 212.</td>
</tr>
<tr>
<td>Jung Keng:</td>
<td>6, 7, 8, 25, 85,</td>
</tr>
<tr>
<td></td>
<td>86, 97, 98, 104, 121,</td>
</tr>
<tr>
<td></td>
<td>147, 148, 218, 266.</td>
</tr>
<tr>
<td>Karlgren, B.</td>
<td>186, 219, 220, 221, 222,</td>
</tr>
<tr>
<td></td>
<td>223, 224, 225, 226, 227,</td>
</tr>
<tr>
<td></td>
<td>228, 229, 230, 231, 232.</td>
</tr>
<tr>
<td>Kuo Mo-jo:</td>
<td>14, 77, 81, 82, 83,</td>
</tr>
<tr>
<td></td>
<td>90, 91, 92, 122, 123,</td>
</tr>
<tr>
<td></td>
<td>124, 151, 152, 153, 154,</td>
</tr>
<tr>
<td></td>
<td>155, 237, 238, 239, 240,</td>
</tr>
<tr>
<td></td>
<td>241.</td>
</tr>
<tr>
<td>Li Chi:</td>
<td>156, 243, 244.</td>
</tr>
<tr>
<td>Li Ya-neng:</td>
<td>125, 157, 247.</td>
</tr>
<tr>
<td>Lo Chen-yü:</td>
<td>67, 68, 79, 94, 101,</td>
</tr>
<tr>
<td></td>
<td>110, 117, 126, 127.</td>
</tr>
<tr>
<td>Sun Hai-p'ê:</td>
<td>20, 102, 103, 105, 128,</td>
</tr>
<tr>
<td></td>
<td>129.</td>
</tr>
<tr>
<td>Tung Tso-pin:</td>
<td>25, 130, 132, 167, 168,</td>
</tr>
<tr>
<td></td>
<td>257, 258, 259.</td>
</tr>
<tr>
<td>Umehara Sueji:</td>
<td>84, 87, 107, 169, 267.</td>
</tr>
<tr>
<td>Wang Kuo-wei:</td>
<td>26, 27, 134, 170, 171,</td>
</tr>
<tr>
<td></td>
<td>172.</td>
</tr>
<tr>
<td>Wu Ch'i-ch'ang:</td>
<td>29, 30, 31, 263.</td>
</tr>
</tbody>
</table>
Abbreviations of Titles.

(a) Catalogues of Bronze Inscriptions.

Ch'an an Catalogue
Ch'eng ch'iu Catalogue
Cheng sung Catalogue
Chi chin Catalogue
Chi ku Catalogue
Ch'i ku Catalogue
Ch'ia chai Catalogue
Chiang hsia Catalogue
Ching wu Catalogue
Chün ku Catalogue
Feng shih Catalogue
Fu chai Catalogue
Hai wai Catalogue
Heng hsien Catalogue
Hsi ch'ing Catalogue
Hsiao hsiao Catalogue
Hsiao t'ang Catalogue
Hsü chien (A) Catalogue
Hsü chien (B) Catalogue
Hsü k'ao Ku Catalogue
Hsü t'ao chai Catalogue
Huai mi Catalogue
K'ao ku Catalogue
Kuan chia Catalogue
Li tai Catalogue
Liang lei Catalogue
Meng p'o Catalogue
Meng wei Catalogue

Ch'ang an huo ku pien, 57.
Ch'eng ch'iu kuan chi chin t'u, 80.
Cheng sung t'ang chi ku yi wen, 79.
Chi chin chin ts'un, 56.
Chi ku chai chung ting yi ch'i k'uan chih, 50.
Ch'i ku shih chi chin wen shu, 72.
Ch'ia chai chi ku lu, 69.
Chiang hsia huang shih tsun ku chai ts'ang ch'i, 111.
Ching wu hsin shih yi ch'i k'uan chih, 64.
Chün ku lu chin wen, 63.
Feng shih chin wen yen p'iu, 76.
Fu chai chung ting k'uan chih, 44.
Hai wai chi chin t'u lu, 97.
Heng hsien so chien so ts'ang chi chin lu, 60.
Hsi ch'ing ku chien, 45.
Hsiao hsiao ching ko chin wen t'o pen, 93.
Hsiao t'ang chi ku lu, 42.
Hsi ch'ing hsü chien chia pien, 47.
Hsi ch'ing hsü chien yi pien, 48.
Hsü k'ao ku t'u, 37.
T'ao chai chi chin hsü lu, 66.
Huai mi shan fang chi chin lu, 53.
K'ao ku t'u, 34.
Kuan chia lou chi chin t'u, 107.
Li tai chung ting yi ch'i k'uan chih fa t'ieh, 39.
Liang lei hsian yi ch'i t'u shih, 59.
Meng p'o shih huo ku ts'ung pien, 73.
Meng wei ts'ao t'ang chi chin t'u, 67.
(b) Catalogues of Oracle Bones.

Chalfant
C.H.C.K.

C.K.W.L.
C.K.W.P.
C.S.T.

F.S.Y.C.
P.T.T.T.
Reports

S.D.Z.S.

Y.C.H.P.
Y.C.I.T.
Y.C.L.P.
Y.C.P.T.

Y.C.S.C.
Y.C.S.T.
Y.C.T.P.
Y.C.W.T.

P'an ku Catalogue
Pao yun Catalogue
Po ku Catalogue
San tai Catalogue
Shan chao Catalogue
Shang chou Catalogue
Shih erh chia Catalogue

Shih liu Catalogue
Shuang chien Catalogue
T'ao chai Catalogue
Tsun ku Catalogue
Ts'ung ku Catalogue
T'u lu Catalogue
Wu ying Catalogue
Yun ch'ing Catalogue

P'an ku lou yi chi'k' uan chih, 58.
Pao yun lou yi chi't'u lu, 75.
Po ku t'u lu, 35.
San tai chi chin wen ts'un, 101.
Shan chao chi chin lu, 88.
Shang chou yi chi shih ming, 62.
Shih erh chi chin t'u lu, 96.
Shih liu chi'ang lo t'ang ku chi'k' uan chi'k' ao, 49.
Shuang chien chi'ih chi chin t'u lu, 89.
T'ao chai chi chin lu, 65.
Tsun ku chai so chi chin t'u chi' u shih, 99.
Ts'ung ku t'ang k' uan chi hshueh, 61.
Liang chi chin wen ts'u ta hsi t'u lu, 91.
Wu ying tien yi chi't'u lu, 86.
Yun chi'ng kuan chin wen, 54.

Chia ku pu tz'u, 119.
Chan hou ching chin hsin huo chia ku chi, 135.
Chia ku wen lu, 128.
Chia ku wen pien, 129.
Chien shou t'ang so ts'ang yin hsü wen tzu k' ao shih, 134.
Fu shih yin chi wei wen, 133.
Fu tz'u t'ung tsuan, 122.
Prelim. Reports of Excav. at Anyang, 156.


Yin ch'i fu yi hsü pien, 125.
Yin ch'i yi chu, 120.
Yin hsü wen tzu lei pien, 127.
Yin ch'i pu tz'u shih wen pien, 121.
Yin hsü shu ch'i hou pien, 126.
Yin ch'i shih to, 124.
Yin ch'i ts'ui pien, 123.
Yin hsü wen tzu chui ho, 136.
(c) Bulletins and Journals.

B.A.S.  
Bulletin of Academia Sinica, Institute of History and Philology, Peiping-Taiwan.

B.M.F.E.A.  

J.R.A.S.  

K.K.H.P.  
K'ao ku hsüeh pao, Peking.

K.K.T.H.  
K'ao ku t'ung hsüeh, Peking.

T.L.T.C.  
Ta lu tsa chih (Continental Magazine), Taiwan.

T.Y.K.K.  
T'ien ye k'ao ku pao kao (The Chinese Journal of Archaeology) Academia Sinica, Nanking.

W.W.T.K.  
Wen wu ts' an k'ao tz'u liao, Peking.

Y.J.C.S.  
Yenching Journal of Chinese Studies, Peiping.

(d) Miscellaneous.

Chi wei chú  
Chi wei chú chin wen shuo, 32.

K'ao shih  
Liang chou chin wen tz'u ta hsi k'ao shih, 92.

Shang Chou  
Shang chou yí ch'i t'ung k'ao, 148.

Yin and Chou  
Yin and Chou in Chinese Bronzes, 222.
Special Reference Works

1. Feng Li-ming, Chung t'ung tzu yüan 鍾鼎字源, 2 vols. 清 錢塘 汪立名(西亭)撰; 光緒二年洞庭秦氏林慶堂重刻康熙五十五年(1776)一隔草堂自刻本. Reprint of 1877.

2. Ferguson, John C. Li t'ai chu lu chi ch'in mu 歴代著錄吉金目, 福開森編輯; Commercial Press, 1938.


7. [Also, 金文續編, 2 vols. 国立中央研究院歷史語言研究所專刊第八, 1935]
8. Jung Keng, Jung Yüan, Chin shih shu lu, 金石書錄目, 1 vol. 国立中央研究院...单刊乙种之二; 容庚跋: 容庚校; 民国二十五年, 1936.


12. Ku Ting-lung, Ku tao wen zu lu 古籀文荃錄, 1 vol. 雇廷龍著; 国立北平研究院史学研究所文字史粹叢編之一, 民国二十五年, 1936.


15. Lin Shang-kuei, Kwang chin shih yün fu 慶金石齋
16. Also, 同石韵府, 10 vols. 明晦陵朱惠 [时明] 輯. 雲間俞顯謨 [子昭] 校; 嘉靖間朱印本[序日
藍印 1522-27].

17. Lou Chi, Han li tzu yüan 資隸字源, 6 vols. 宋
橋李端機 [義翰] 輯. 姚氏恕進齋重刻本.

18. Nakajima Shô, Shu chi yuán yüan 書契淵源, 17 vols. 中島終長; 文求堂書店, 昭和十二年
Tokyo, 1937.

19. Shao Tzu-feng, Chia ku shu lu chieh ti 甲骨書
錄解題, 1 vol. 邵子風輯; 燕京大學研究

溝川孫海波 [通溥] 撰集. 哈佛燕京學社出
版, 1934.

21. Sun Yi-jang, Ming yuán 名原, 2 vols. 清瑞
安孫誥讓 [仲容] 纂. 光緒三十一自刻本. 1906.


23. 高田忠周 [竹山] 纂, Tokyo, 1925. [Also, Kanji,
24. Shōhai 漢字詳解, 3 vols. 西東書房藏版, 明治四十三年, 1911] [Also, Rihen 補篇, 5 vols. 高田 忠周自筆原稿


26. Wang Kuo-wei, Sung tai chin wen chu lu piao, 宋代全文著錄表, Collected Works, vol. 27. [Also,


29. Wu Chi-ch'ang, Chin wen shih tsu p'iu 全文世族 譜, 2 vols. 賽寧吳其昌著; 国立中央研究院...

30. 事例之二, 民国二十五年, 1936. [Also, 全文歷 朔 疏 譜, 2 vols. 国立武汉大學圖書館. 民國二十五年, 1936] [Also, 殷墟書契解説, 1 vol. 說 雅堂 藏版, 民国二十三年, 1934.]

32. Yang Shu-ta, Chi wei chu chin wen shuo, 稽徵 居全文說, 1 vol. 楊樹達著, 考古學專刊甲種 第一号, 中國科學院出版, 1952. [Also, 靳林 顧甲文說: 卜 醫求義, 羣聰出版社, 上海, 1954]
Catalogues of Bronze Inscriptions


36. Abb. Po ku Catalogue. [Also, Yi cheng Yang ed.]


38. Abb. Hsü kao ku Catalogue. [Also, Tsung shu chi cheng, no. 1534]

39. Li tai chung ting yi chii huan chih fa tien, 4 vols. 歷代鐘鼎彝器款識法帖. 宋錢塘薛商功(惠敏)著. 岳山人刻朱印本. 萬曆十六年. By Hsieh Sheng-kung. Ming red ink edition - unreliable; unless specifically stated this edition is not referred to (1589). [Also, reprint of Chüng Chen edition by Yü Hsing-wu 于氏景印朋書顏刻本, 民国十四年, 1925] [Also, 鐘鼎款識臨宋寫本, (嘉慶丁卯初板) 光緒癸卯, 1903 reprint of Chia Ch'ing ed. based on a Sung manuscript]. Abb. Li tai Catalogue.

40. Hsiao tang chi ku lu 嘉堂集古錄, 2 vols. 宋任城
王俅(于彬)輯. 淳熙三年跋木(1177), 續古逸叢書石印宋刻本 vols. 24 & 25, 1922. By Wang Chiu, Lithographic reprint of Sung ed. [Also, 振新書社番明刻本, 朱印本. undated late Ching reprint with new blocks of Ming ed.]
Abb. Hsiao Yang Catalogue.


(b) The Early Ching Catalogues.

45. [Ch'in ting] Hsî ch'ing ku chien 欽定西清古鑑, 26 vols. 清高宗敕編. 上海鴻文書局石印. 光緒十四年.


51. Ch'iu ku ts'ing she chih shih tzu 求古精舍全石圖, 4 vols. 清書程陳經(抱之)著. 嘉慶十八年說劍樓自刻本. By Chien Ching, 1814.


54. Yün ch'ing kuan chin wen 筠清館全文, 2 vols. 清南海劉榮光[荷屋]撰; 道光二十年自刻


60. Heng hsien so chien so ts'ang chi ch'un lu 恆軒所見所藏吉金錄, 2 vols. 清吳縣吳大澂[清卿] 稿.

61. Ts'ung ku t'ang k'uan chih hsüeh 從古堂校識學, 8 vols. 清 嘉興徐同柏 (壽臧) 譯文, 男士燕標錄; 光緒二十二年同文書局石印本. By Hsü Tung-po, 1887. Abb. Ts'ung ku Catalogue.


(d) Recent Catalogues


65. Tao ch'ai chi chin lu 陶齋吉金錄, 4 vols. 清 亢 陽端方 (午橋) 撰; 光緒戊申呈石印本. By

27. Meng Wei. Wei Meng-chi chien fu. 南郭華堂古金圖。3 vols. 上虞羅振玉（叔丁）輯；民國六年
自影印本。By Lo Ch'en-yü. 1917. (Also continuation, 1 vol. same year) Abb. Meng Wei Catalogue.

清吳縣吳大澂（吳光）著；涵芬樓影印本。

29. Fu chia ch'i chien lu. 寧齋吉金録。4 vols. 清湘齋
陳介祺（仲將）著。順德鄭容（叔杭）輯；戊午


31. Ch'i chia chih-chi ch'ien wen shan 奇齋室吉文叢。
10 vols. 湖南劉心源（幼用）學；民國十五年翻

13. Chi chien chen chung 夏金說巢. 1 vol. 戊戌 陸和九題. Title dated 1908.


17. Piao shih pien chung. 剟氏編鐘圖錦. 1 vol. 徐中舒著; 中央研究所歷史語言所.
文所郵票本。民國三十年。By Wu Cheng-chen, 1930.


21. Chien wen hsiang hsia 文文隨考。4 vol. 安山郭洪若 (鼎堂) 著。文虎堂東京昭和七年。By Kuo Mung-jo, Tokyo, 1922.

22. Chien wen yi shih chu shih yi 文文緯解之餘。1 vol. 安山郭洪若 (鼎堂) 著。文虎堂東京昭和七年。By Kuo Mung-jo, Tokyo, 1922.


24. Pien chen su hsiang yüeh dai kuan 任氣者古院之淵。1 vol. 陳東方文化學院京都研究所。研究報告第二冊。昭和七年。陳正山譯者。By Unohara Suneji, 1932.

25. Sung chen chu shih hsia 順商古全圖鍾。1 vol.
451

東莞容庚 (屬日) 著; 民國二十六年。By Jung Keng, 1933.


100. Ku tai ming kuo hui kao hsü pien 古代銘刻彙攷續編, 3 vols. 樂山郭沫若 (鼎堂) 著; 文求堂東京昭和九年。By Kuo Mo-jo, Tokyö, 1934.

謝大系古籍，Tokyo, 1935. Online [here].


18. Fu-hsin hsien shih chu hsien shih, hsien hsien hsien. Online [here].


106. Ch'ih an ts'ang chin 疑盦藏金, 1 vol. 国立師範学院史部系致堂室事例之二. 民國二十九年. 1940.

105. Shodo Zen [書道全集], vol. 1, China: Yin, Chou. (Also vol. 1 of old series, 1931) Abb. S. D. Z. S.

110. Yin wen tzu ts'un 殷文字存, 1 vol. 上虞羅振玉 [叔公布著], 集古遺文第二, 民國六年, By Lo Chen- yü, 1917.


e) Original Rubbings.


113. Shuang chien ch'i'h chi chin mo pen 雙劍譜吉金墨本, 1 vol., Kyōto University.

114. Hsien ts'in wen tzu ch'en shih chia ts'ang 先秦文字陳氏家藏, 1 vol., Kyōto University.

115. Wang chiao sheng yi chai chi ts'un ch'in shih t'a pen 望姓生譜齋輯存金石拓本, 1 vol. Kyōto University.
117. 賢堂所藏古字文, 2 vols. from Lo Chen-yü's collection.
118. Pai No Collection. 賢納所藏原拓本, over 300 rubbings of which more than 100 are unpublished.

Catalogues of Oracle Bone Inscriptions.
120. Chin Tsu-Tung, Yin chi yi chu. 殷契遺珠, 3 vols. 金祖同著; 孔德圖書館殷書第一種. 民國二十八年, 1939. Abb. Y.C.I.T. [1,000 pieces].


130. Tung Tso-pin, Yin hsü wen tsu yü pien, 殷虛文 字乙编, 第二本, 1 vol. 董作賓主編.

131. Taiwan edition 1953 (Also Mainland re-print, 1953) 
Abb. Y.C.U.T.I. [2,332 pieces, all fully attested].

132. Tung Tso-pin, Yin hsü wen tsu wai pien, 殷虛 
文字外编, 1 vol. 董作賓輯; 華文印書館

133. Wang Hsiang, Fu shih yin chi wei wén, 福室殷
契微文, 6 vols. 王際萱, 民國四十八年, 1929. Abb.
F.S.Y.C. [1,125 pieces]

134. Wang Kuo-wei, Chien shou tang so ts'ang yin hsü wen 
tsu k'o shih, 慈壽堂所藏殷虛文字故畫, 2 vols.
荷蘭明智大學印行; 王國維著, 姬佛陀類

135. Hu Hou-hsuan, Chien hou ching chin hsin huo chia k'u chi, 戰後京津新舊甲骨集, 4 vols. 胡厚
宣編集; 蕭晗出版社, Shanghai, 1954. Abb.
C.H.C.K. [5,642 pieces].

136. Yin hsü wen tsu chui ho 殷虛文字綴合, 1 vol.
[1,300-400 pieces joined into 482 pieces, bulk fully attested].
<table>
<thead>
<tr>
<th>Page</th>
<th>Name</th>
<th>Work Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>137</td>
<td>Chao Hsi-ku</td>
<td>T'ung t'ien ch'ing lu chi, Ts'ung shu chi ch'eng no. 1552; also quoted by T'ao Tsung-yi, Chou keng lu, Ts'ung shu chi ch'eng no. 0219, vol. 2, pp. 246-7. Also, Hsi shan hsien kuan ts'ung shu, chuan 46.</td>
</tr>
<tr>
<td>138</td>
<td>Chou Fa-kao</td>
<td>Chin wen ling shih, 1 vol. Kuo li chung yang yen chiu yu an ... special publication no. 34, Taiwan, 1951.</td>
</tr>
<tr>
<td>139</td>
<td>Chu Chien-hsin</td>
<td>Chin shih hsueh, 1 vol. Kuo hsueh hsiao ts'ung shu, 1939.</td>
</tr>
<tr>
<td>141</td>
<td>Fujihara Sōsui</td>
<td>Shodo Kinsekigaku, 1 vol. Tōkyō, 1953.</td>
</tr>
<tr>
<td>142</td>
<td>Hsiang Yuan-pien</td>
<td>Hsüan lu po lun, extract quoted by Jung Keng, Shang chou yi ch'i t'ung k'ao, p. 191.</td>
</tr>
<tr>
<td>143</td>
<td>Huang Kung-chu</td>
<td>Chou ts' lin chin shih yen hsüan p'ing chu, 1 vol., Hsueh sheng kuo hsüeh ts'ung shu, Commercial Press, Shanghai, 1935.</td>
</tr>
<tr>
<td>145</td>
<td>Jao Tsung-yi</td>
<td>Chang sha ch'u t'u chan kuo ch'u chien ch'u shih, 1 vol., Hong Kong, 1955. (no bibliographical information given).</td>
</tr>
<tr>
<td>146</td>
<td>Jung Keng</td>
<td>Hsi ch'ing yi ch'i shih yi, 1 vol., K'ao ku hsüeh she chuan chi, No. 20, 1940.</td>
</tr>
<tr>
<td>Line</td>
<td>Name</td>
<td>Title and Details</td>
</tr>
<tr>
<td>------</td>
<td>--------------------</td>
<td>-----------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>148</td>
<td>Jung Keng</td>
<td><em>Shang chou yi ch'i t'ung k'ao</em>, 2 vols., Peking, 1941.</td>
</tr>
<tr>
<td>149</td>
<td>Kaizuka Shigeki</td>
<td><em>Chûkoku kodaishigaku no hatten</em>, 1 vol., Tôkyô, 1948.</td>
</tr>
<tr>
<td>150</td>
<td>Komai Kazuchika</td>
<td><em>Chûkoku Kokyô no Kenkyû</em>, Tôkyô, 1953.</td>
</tr>
<tr>
<td>152</td>
<td></td>
<td><em>Nu li chih shih tai</em>, 1 vol., Peking, 1954.</td>
</tr>
<tr>
<td>153</td>
<td></td>
<td><em>Ch'ing t'ung shih tai</em>, 1 vol., Peking, 1954.</td>
</tr>
<tr>
<td>154</td>
<td></td>
<td><em>Shih n'i p'an shu</em>, 1 vol., Peking, 1954.</td>
</tr>
<tr>
<td>156</td>
<td>Li Ya-neng</td>
<td><em>Yin tai she hui sheng huo</em>, 1 vol., Shanghai, 1955.</td>
</tr>
<tr>
<td>158</td>
<td>Nakamura Fusetsu</td>
<td><em>Sandaishinkan no shin ni shiruseru monji</em>, 1 vol., Tôkyô, 1934.</td>
</tr>
<tr>
<td>159</td>
<td>Ou-yang Hsien</td>
<td><em>Chi ku lu na wei</em>, 4 vols. 1887 edition.</td>
</tr>
<tr>
<td>160</td>
<td>Sekino Takeshi</td>
<td><em>Pan-wa-tang no kenkyû</em>, Tôkyô, 19*.</td>
</tr>
<tr>
<td>161</td>
<td>Shih Shu-ch'ing</td>
<td><em>Ch'ang sha yang t'ien wu ch'iu t'iu ch'iu chien yen chiu</em>, 1 vol., Shanghai, 1955.</td>
</tr>
<tr>
<td>162</td>
<td>Sun Yi-yang</td>
<td><em>Ku chou shih yi</em> together with: <em>Sung cheng ho li ch'i wen tsu k'ao</em>, 1 vol., 1892.</td>
</tr>
<tr>
<td>No.</td>
<td>Author</td>
<td>Title</td>
</tr>
<tr>
<td>-----</td>
<td>----------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>165</td>
<td>T'ao Tsung-yi</td>
<td><em>Cho keng lu,</em> Ts'ung shu chi ch'eng, no. 0219.</td>
</tr>
<tr>
<td>166</td>
<td>Ti Ch'i-nien</td>
<td><em>Chou shih,</em> Ts'ung shu chi ch'eng ch'u pien, no. 1513.</td>
</tr>
<tr>
<td>167</td>
<td>Tung Tso-pin</td>
<td><em>An Interpretation of the Ancient Chinese Civilization,</em> 1 vol., Chinese Association for the United Nations, Taiwan, 1952. (Pub. in English)</td>
</tr>
<tr>
<td>168</td>
<td></td>
<td><em>Chia ku hsueh wu shih nien,</em> 1 vol. Taiwan, 1955.</td>
</tr>
<tr>
<td>169</td>
<td>Umehara Sueji</td>
<td><em>Chung kuo ch'ing t'ung ch'i shih tai k'ao,</em> 1 vol. translated by Wu Hou-hsuan, Shih ti hsiao ts'ung shu, Commercial Press, Shanghai, 1936.</td>
</tr>
<tr>
<td>171</td>
<td></td>
<td><em>Kuan t'ang ku chin wen k'ao shih,</em> Collected Works.</td>
</tr>
<tr>
<td>172</td>
<td></td>
<td><em>Mao kung ting ming k'ao shih,</em> kuan t'ang ku chin wen k'ao shih, Collected works, vol. 16.</td>
</tr>
<tr>
<td>174</td>
<td>Wu Tse</td>
<td><em>Ku tai shih,</em> 1 vol. (Chung kuo li shih ta hsi), Peking, 1953.</td>
</tr>
<tr>
<td>175</td>
<td>Yen Yi-p'ing</td>
<td><em>Hsü yin li p'u,</em> 1 vol. Taiwan, 1955.</td>
</tr>
<tr>
<td>No.</td>
<td>Author</td>
<td>Title</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>176</td>
<td>Ackerman, P.</td>
<td><em>Ritual Bronzes of Ancient China</em>, Dryden Press, New York, 1945</td>
</tr>
<tr>
<td>181</td>
<td>(Detroit)</td>
<td><em>An Exhibition of Ancient Chinese Ritual Bronzes</em>, Loaned by C. T. Loo and Coy. <em>The Detroit Institute of Arts</em>, 1940</td>
</tr>
<tr>
<td>182</td>
<td>Giles, H. A.</td>
<td><em>Adversaria Sinica</em>, Kelly and Walsh Ltd., Shanghai, 1914</td>
</tr>
<tr>
<td>184</td>
<td>Heusden, W. van</td>
<td><em>Ancient Chinese Bronzes of the Shang and Chou Dynasties</em>, privately published, Tokyo, 1952</td>
</tr>
<tr>
<td>186</td>
<td>Karlgren B.</td>
<td><em>A Catalogue of the Chinese Bronzes in the Alfred F. Pillsbury Collection</em>, University of Minneapolis Press, 1950</td>
</tr>
<tr>
<td>No.</td>
<td>Author</td>
<td>Title and Details</td>
</tr>
<tr>
<td>-----</td>
<td>--------</td>
<td>-------------------</td>
</tr>
<tr>
<td>189</td>
<td>Karlgren, B.</td>
<td>Philology and Ancient China, Oslo, 1926.</td>
</tr>
<tr>
<td>191</td>
<td>Tch'ou Tö-yi</td>
<td>Bronzes Antiques de la Chine Appartenant a C. T. Loo et Cie, Avec une Preface et des Notes de M. Paul Pelliot, Paris, 1924.</td>
</tr>
<tr>
<td>192</td>
<td>White, W. C.</td>
<td>Tombs of Old Lo-yang, Shanghai, 1934.</td>
</tr>
<tr>
<td>193</td>
<td></td>
<td>Bone Culture of Ancient China, Museum Studies, Number Four, University of Toronto Press, Toronto, 1945.</td>
</tr>
</tbody>
</table>

**Articles and Short Studies.**

<table>
<thead>
<tr>
<th>No.</th>
<th>Author</th>
<th>Title and Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>No.</td>
<td>Author(s)</td>
<td>Title</td>
</tr>
<tr>
<td>-----</td>
<td>-------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>198</td>
<td>Chao Ch'ing-fang</td>
<td>An hui shou hsien chan kuo mu ch'u t'ung ch'i chin chi lu, W.W.T.K., no. 8, 1955.</td>
</tr>
<tr>
<td>199</td>
<td>Ch'ien Kung-jou</td>
<td>Chieh shao chin wen ts'ian k'ao shu, K. K. T. H., no. 4, 1956.</td>
</tr>
<tr>
<td>200</td>
<td>Ch'ien P'an</td>
<td>Writings on Silk in the Pre-Ch'in Period and the Han Dynasty, B.A.S. vol. 24, Taiwan, 1953.</td>
</tr>
<tr>
<td>203</td>
<td></td>
<td>A Chronological Study of Western Chou Bronzes, K.K.H.P., vols. 9, 10, 11, and 12, 1955-56.</td>
</tr>
<tr>
<td>207</td>
<td>Chou Chao-hsiang</td>
<td>Pottery of the Chou Dynasty, (Edited by B. Karlgren, with some notes by J. G. Anderson.) B.M.F.E.A. vol. 1, 1929.</td>
</tr>
<tr>
<td>208</td>
<td>Ferguson J. C.</td>
<td>An Examination of Chinese Bronzes, Annual Report Smithsonian Institution, 1914, (Publ. 2347).</td>
</tr>
</tbody>
</table>
210 Hopkins, L. C.  
Chinese Writing in the Chou Dynasty in the Light of Recent Discoveries, J.R.A.S., 1911.

211  
The Chinese Bronze Known as the "Bushell Bowl" and its Inscription, J.R.A.S., 1912.

212  
A Funeral Elegy and a Family Tree Inscribed on Bone, J.R.A.S., 1912.

213 Hsü Chung-shu  

214  

215  
Lun ku t'ung ch'i chih chien p'ieh, K'ao ku she k'an, vol. 4.

216 Jao Tsung-yi  

217 Jung Keng  
A Classified List of Authentic and Forged, Lost and Extant Bronzes (with Inscriptions) as Recorded in the Imperial Catalogues of the Antiques in the Palace, Y.J.C.S., vol. 5, Peiping, 1929.

218 Karlgren, B.  

219  

220  
On the Date of the Piao Bells, B.M.F.E.A., vol. 6, 1934.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>227</td>
<td></td>
<td>Huai and Han, B.M.F.E.A., vol. 13, 1941.</td>
</tr>
<tr>
<td>228</td>
<td></td>
<td>The Book of Odes, B.M.F.E.A., vols. 16-17, 1944-5.</td>
</tr>
<tr>
<td>236</td>
<td></td>
<td>Kuo Mo-jo</td>
</tr>
<tr>
<td>237</td>
<td></td>
<td>長喜香 ming shih wen, W.W.T.K., no. 2, 1955. (Also notice of find incorporating this inscription on opp. page (129) of same issue).</td>
</tr>
<tr>
<td>No.</td>
<td>Author(s)</td>
<td>Title</td>
</tr>
<tr>
<td>-----</td>
<td>-----------</td>
<td>-------</td>
</tr>
<tr>
<td>238</td>
<td>Kuo Mo-jo</td>
<td>The Dating of a Royal Tomb of the Ts'ai State, Recently Excavated at Shou Hsien, Anhui, K.K.H.P., vol. 11, 1956.</td>
</tr>
<tr>
<td>239</td>
<td></td>
<td>A Study of a Western Chou Bronze, Recently Unearthed at Tan-t'u, Kiangsu, K.K.H.P., vol. 11, 1956.</td>
</tr>
<tr>
<td>240</td>
<td>Kuo Ting-t'ang (Mo-jo)</td>
<td>A Discussion on the &quot;Pan&quot; of T'ang and the &quot;Ting&quot; of K'ung, Y.J.C.S., vol. 9, 1931.</td>
</tr>
<tr>
<td>244</td>
<td></td>
<td>Studies of Hsiao-t'ung Bronzes, Part 1, T.Y.K.K., no. 3, Commercial Press, Shanghai, 1948.</td>
</tr>
<tr>
<td>246</td>
<td>Li T'ing-chien</td>
<td>Je ho ling yu hsien k'ai tao ying tz'u ts'ung fa hsien ti ku tai ch'ing ts'ung ch'i, W.W.T.K., no. 8, 1955.</td>
</tr>
<tr>
<td>No.</td>
<td>Author</td>
<td>Title</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>249</td>
<td>Sekino Takeshi</td>
<td>Recent Archaeological Investigations in China, Archaeology, vol. 6 No. 1, 1953 (Reprint).</td>
</tr>
<tr>
<td>250</td>
<td>Shang Ch'eng-tso</td>
<td>Ku t'ai y'i ch'i wei tzu yen chiu, Chin ling hsiuh pao, vol. 3, 1934.</td>
</tr>
<tr>
<td>251</td>
<td>Shih Chang-yü</td>
<td>Bronze Casting in the Shang Dynasty, B.A.S., vol. 26, Taiwan, 1953.</td>
</tr>
<tr>
<td>252</td>
<td></td>
<td>Shang chou y'i ch'i ming wen pu wei li lueh, T.L.T.C., 8, 5, 6, 7, 1954.</td>
</tr>
<tr>
<td>253</td>
<td>Shih Hsing-pang</td>
<td>Ch'ang an n'u tu ts'un hsi chou mu tsang fa chüeh chi, K.K.H.P.</td>
</tr>
<tr>
<td>255</td>
<td>Ting Shan</td>
<td>On the ch'i, B.A.S., vol. 2 pt. 4. Also, An Investigation into ch'i, same volume, Peiping, 1932.</td>
</tr>
<tr>
<td>257</td>
<td>Tung Tso-pin</td>
<td>A Chronology of the Western Chou Dynasty, B.A.S., vol. 23 (B).</td>
</tr>
<tr>
<td>258</td>
<td></td>
<td>Mao kung ting k'ao nien, T.L.T.C., 5.8/3-6, 1952.</td>
</tr>
<tr>
<td>261</td>
<td></td>
<td>Chiang su tang tu' u hsien yen tung shan ch'ia tu ti ku tai ch'ing tung ch'i, W.W.T.K., no. 5, 1955.</td>
</tr>
</tbody>
</table>
262  Wang Chia-yu  
Chisu ch'unan pa hsien tung sun 
apa ch'u t'u ti ku yin chi ku huo 
pi, K.K.T.H., no. 6, 1955.

263  Wu Ch'i-ch'ang  
Study of the Inscription on the 

264  Yetts, W. P.  
A Datable Shang-Yin Inscription, 

Addenda.

265  Visser, H. F. E.  
Asiatic Art, in private collections of Holland and Belgium, 
1948.

266  Jung Kang  
Hsi ch'ing yi chi'i shih yi, 1 
vol. K'ao ku hsuh she chuan chi, 
no. 26, 1940.

267  Umehara Sueji  
Pien-chin no kokogaku teki kōsatsu, 
1 vol. Tōhō bunkagakuin, Kyōto, 
1933.

268  Li Chien  
Chin shih fan chin chi ti yi, 1 
vol. Printer's proof of catalogue which has not been published; 
several of the inscriptions reproduced have not been published 
elsewhere.

269  Kurz, Otto  
Fakes. Faber and Faber Ltd., 
1947.

270  Ch'ien Meng-chia  
Research on a Group of Ts'ai 
Bronze, Recently found at Shou 
Hsien, Anhui Province. K.K.H.P., 
vol. 12.

271  T'ang Lan  
A Study of a Western Chou Bronze 
Recently Unearthed at Tian-t'u, 
12.

272  Hua hsien fa chueh pao kao, Chung 
kuo t'ien ye k'ao ku pao kao chi, 
no. 1, Peking, 1956.