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The Typological Evolution of the Chinese Language

Introductory. The present paper grew out of my lecture held on March 1st, 1947, at the VIIIth (and first post-war) Meeting of Polish Orientalists in Kraków. First of all, I want to express my great indebtedness and profound gratitude to my master Professor W. Jabłoński, Warsaw, for his helpful criticisms and suggestions concerning the sinological side of the matter discussed which caused many a complementary remark to be made and the whole § 5 to be added. Furthermore, I should like to avail myself of this opportunity to express my gratitude to the French Centre National de la Recherche Scientifique for having made possible my coming to Paris and spending there one year of study and research in close contact with the learned sinological world of the capital of France; my special thanks are due to Prof. P. Demiéville, Collège de France, and E. Mestre, Ecole Pratique des Hautes Etudes, for invaluable help and advice in the course of my research work in Paris. Finally, I wish to acknowledge my indebtedness to my friend Dr. Z. Rysiewicz, now Professor at the University of Warsaw, who had the kindness to read the manuscript and discuss its contents from the point of view of general linguistics; his remarks were of considerable influence in giving this paper its present shape. — Let it be added that always thankful for, but not always obedient to advice received as I have been, I alone am responsible for the whole of the present paper; in particular the reader is requested to associate what he will judge erroneous opinions only with my own name.

The only purpose of the present paper is that of attempting to point out clearly the general line of the typological evolution

of Chinese as evidenced by comparing its archaic stage, dating back as far as the 1st millennium B. C. and revealed to us by recent reconstructions, with its modern form.

It stands to reason that the characterization of the evolution of a language must be preceded by those of its initial stage (in the present case the 1st millennium B. C.) and its final stage (modern language) as well. Despite the chronological order I have thought it better to begin with the latter and thus proceed from the characterization of facts empirically given to that of reconstructed ones; the disposition of this paper, accordingly, runs as follows: a typological characterization of modern spoken Chinese (§ 2); a typological characterization, according to the same criteria as in § 2, of the Chinese language of the Chou period as reconstructed by modern sinological research (Karlgren's Archaic Chinese, § 3); and, lastly, on the basis of the two characterizations of stages both initial and final — a characterization of the typological evolution (§ 4). § 1, being the proper introduction to the main topic, deals with the functional criteria which, in my opinion, seem effective for resolving the intricate question of a typological qualification of Chinese, a question which hitherto has not been definitively solved¹). Finally, in § 5, I shall endeavour to meet some of the objections the reader is supposed to put forward with regard to my paper and adduce facts justifying the method adopted in working up the present contribution.

¹) H. Maspero in his paper *La langue chinoise* (Conférences de l'Institut de Linguistique de l'Université de Paris, année 1933, Paris 1934) points out that as far as a general characterization of Chinese is concerned no great progress in sinology can be traced; in everything the scholars have done in this respect "il s'agit moins de comprendre au juste ce qu'est la langue chinoise que de la rapprocher des nôtres par quelque moyen" (p. 34). As far as I am aware the first and most ingenious typological characterization, both synchronical and diachronical, of the Chinese language, based on modern linguistic principles, is given in А. И. Иванов — Е. Д. Поливанов, *Грамматика современного китайского языка*, Moscow 1930 (v. particularly the introductory chapter *Вводные замечания*, pp. 3—33); that invaluable work which the reader shall be referred to more than once in the course of the present paper must have been unknown to

In spite of my attempts in making the preliminary § 1, dealing with non-sinological matter, as concise as possible, it turned out fairly long and may seem out of place in a paper claiming to be a sinological one. I feel, however, excused by the wise saying of Confucius: *kung yü shan k'i shü, pi sien li k'i k'i* [1]²) 'If the workman wishes his work to be well done, he must, first of all, sharpen his tools', *Lun-yü* [2], XV, 9; this, of course, is not to mean that I consider my tools to have been sharpened enough nor my work well done.

§ 1. The typological characterization of stages: initial (i. e. the earliest one susceptible of being reconstructed) and final (i. e. modern) of the Chinese language which will follow in §§ 2 and 3 has been based on an investigation of functional values of phonetic (articulatory) units, both simple and complex ones, of that language according to the criteria largely borrowed from Prof. W. Doroszewski's 'functional phonetics', duly widened and adapted for the purpose, and for a considerable part formulated in the terms of this phonetics; hence there arises the necessity of furnishing the reader with some information on this subject as well as that of establishing the notional and terminological scheme to serve us in the following paragraphs.

It seems to be a matter of course that the sounds of a language may be studied for their own sake, i. e., from the point of view of descriptive phonetics, or from the point of view of the function they accomplish in concrete word-forms; in this latter case one has to do with functional phonetics. Now, W. Doroszewski³),

most Western sinologists, as may be seen from what they write. Another synthetical survey of Chinese, convergent in essential points with the former though manifestly independent of it, is Denzel Carr, *A Characterization of the Chinese National Language*, Bulletin de la Société Polonaise de Linguistique, fasc. III, Kraków 1932, pp. 38—99. For further bibliographical data v. *infra* § 2.

²) Numbers in brackets [] refer to the Index of Chinese characters given in the end of this paper, pp. 424—429.

³) See his papers *Les sons du polonais et leur utilisation fonctionnelle*, Revue des Etudes Slaves XII, Paris 1932, pp. 5—18, and *Z zagadnień fonetyki ogólnej* (Problems of General Phonetics,

on the basis of an analysis of Polish linguistic material, defines the different functional categories and brings about a functional classification of Polish phonemes. According to him there are three functional categories of phonemes, viz.: 1. phonemes functionally active, i. e., those which participate in functional alternations in word-forms and being at the same time irreplaceable structural elements in words, are thus of paramount importance from the point of view both of flexion and word-structure (cf. p. 69); 2. phonemes functionally passive, i. e., those which although never acting as characteristics of word-forms nor participating in flexional alternations are, none the less, necessary and irreplaceable simple sound-constituents of words containing them (p. 70); and 3. phonemes functionally indifferent, i. e., phonematic variants dependent on position and having no functional rôle whether flexional or structural (p. 70). Let the above definitions be illustrated by a few examples selected from among those adduced by Doroszewski. All Polish vowels and most consonants belong to category 1, e. g. the flexional alternation *ɔ* (written *a*): *ɛ* in *wąż* 'a serpent, nom.': *węża* 'of a serpent, gen.' being one of the many proofs of functional activity of nasals *ɔ* (*a*), *ɛ*. Category 2 contains in Polish only a few palatal consonants, e. g. *ɕ*, the functional passivity of which is evidenced by two facts: it never participates in any flexional alternation in any Polish word, and, secondly, there are words used in Polish—it makes no difference that they are borrowed from foreign languages—e. g. *diuna*, pron. *duna* 'sand-hill', in which the *ɕ* cannot be replaced by another phoneme, be it the nearest with regard to articulation and acoustic effect, without destroying the identity of the word in question: one is allowed to say neither *duna* nor *tuna* for *duna*. In category 3, at last, we have a few variants of phonemes, e. g. the alveolar *ʃ* which appears in Polish in certain dependent (and only dependent!) positions, as in *drzewo* 'tree', commonly pronounced *dżewo*, but may always be replaced by the corresponding dental pho-

in Polish), *Comptes Rendus des Séances de la Société des Sciences et des Lettres de Varsovie XXVII*, 1934, Classe I — Warszawa 1936, pp. 37—71. The following page numbers refer to this latter paper.

neme *d*: *dževo* without any risk of destruction or modification of sense of the word in question.

Indeed, it does not lie in my competence to discuss the problem of whether Prof. Doroszewski's functional classification of phonemes is exhaustive or wide enough to embrace the whole of the linguistic material offered by Polish and, as should be expected of it, by other Indoeuropean languages, nor am I going to draw examples from those languages⁴). What is most essential in my opinion is that it can be taken as a starting point for adaptations (or more strictly: generalizations) after which it will be able to serve us, I daresay, as an effective criterion for a general characterization of what is meant under the linguistic type represented by Chinese, both from synchronical and diachronical point of view. The general methodological principle of establishing the functional value of any phonetic unit exclusively on the basis of an examination of its rôle in word-forms (cf. Doroszewski, *op. c.*, p. 70) shall conserve its full validity as far as non-syntactical values (v. *infra*) are concerned.

A lot of questions arise in this connection. First of all, the notion of the functional value of articulatory subunits should be clearly detached from the notion of flexion if we intend to examine and establish functional values with regard to articulatory subunits in a non-flexional language, viz. Chinese. This can easily be attained by replacing the narrow notion of 'flexion' by a far wider one of 'morphology',⁵) embracing besides the flexion all the phenomena of word-formation (composition included) as well. Consequently, instead of 'flexional processes' we shall have to speak of 'morphological processes in general' which we have to do with in both flexional and non-flexional languages, in Chinese too, although we often hear that Chinese has no morphology

⁴) The same phoneme being capable of having different functional values in different languages is a fact needing no further explanation.

⁵) It is to be noted that in *Les sons du polonais et leur utilisation fonctionnelle* Doroszewski speaks expressly of an 'alternance morphologique' which "peut signifier non seulement alternance de deux formes casuelles d'un mot, mais aussi alternance de deux ou plusieurs—morphèmes" (p. 15).

whatever⁶). Similarly, we have to abandon the narrow notion of 'sound-alternation' confined to morphological processes occurring inside the stem and replace it by a wider (or, strictly speaking, the widest possible) notion of 'simple morphological mark in general', i. e. 'morpheme', embracing all articulatory subunits capable of doing any morphological job inside as well as outside the word-stem⁷). The third modification is still more far-reaching: I suggest the application of the notion of functional value not only to the simplest sound subunits, i. e. phonemes, as Prof. Doroszewski does, but also to larger articulatory complexes, sound groups of some kind or other. This latter generalization seems to be necessarily implied by the two preceding ones and, what is still more important, in perfect accord with facts empirically given in linguistic reality, as morphological processes in various languages are frequently developed by means of adding or interchanging certain sound-groups, complex from the standpoint of descriptive phonetics but indecomposable from that of morphology. The sinologist will easily guess that as far as Chinese is concerned it will be the functional rôle of the most natural—physiologically and acoustically—sound group i. e. syllable which will attract our particular attention, v. *infra* §§ 2 and 3. In accordance with what has been said above I shall consider to be

⁶) E. g. not long ago Kao Ming-k'ai [3] in the introductory chapter to his *Essai sur la valeur réelle des particules prépositionnelles en chinois*, Paris 1940, insisted on Chinese being a language in which "la morphologie n'existe pas" (p. 11). — On morphology in modern Chinese being strictly connected with polysyllabicity as well as on misunderstandings concerning morphology and syntax in Chinese and difficulty of their delimitation see Ivanov and Polivanov, *Grammatika*, pp. 21—22. Cf. also my remarks *infra* at the end of § 4.

⁷) Accordingly to this and in connection with Doroszewski's example of alternation $q(q) : \epsilon$ in *wąz : węża*, quoted above p. 374, illustrating the functional activity of nasals $q(q), \epsilon$ in Polish, I will say that the morphological interchange of endings $-a : -\epsilon$ in e. g. *ręk-a* 'with the hand, instr.' : *ręk-ε* 'the hand, acc.' is just as good an illustration of the functional activity of the phonemes in question, although it is no alternation in the sense of vowel interchange inside the stem.

functionally active any articulatory subunit, whether simple or complex from the point of view of descriptive phonetics, capable of doing the job of a morphological mark of any kind (not only flexional but also word-formative, composition being considered, too, as a word-formative process) and indecomposable from the morphological point of view; thus the notion of 'functional activity'—in the sense above indicated—is necessarily and strictly connected with that of 'morpheme'. It goes without saying that such subunits are, at the same time, irreplaceable constituents of words containing them; subunits functionally passive have but this latter characteristic and are deprived of the former, whereas those functionally indifferent are deprived of either.

So far we have exhausted the stock of values applicable to articulatory units (simple and complex ones) examined from the point of view of their morphological rôle. There are, however, in every language sound-complexes—and we have included sound-complexes into our discussion—which from the point of view of the function they accomplish in that language are much more than mere morphological marks; their values, too, are to be included into the general functional scheme. The reader is sure to guess what I mean: to the tripartite scheme of values corresponding to the different morphological functions (or lack of morphological functions) of articulatory units, phonemes and sound-groups, further values are to be added, viz. those corresponding to the syntactical rôle of certain sound groups. In order to avoid complicating the matter I will not coin new abstract terms for syntactical values and shall use the terms commonly applied to the corresponding syntactical units, simple and complex, viz. word and word-group; the reader is asked to remember that these terms, when used in the functional schemes below, do not mean things (words and word-groups) but functional values corresponding to these things. The first syntactically functional value shall, of course, be applied only to those articulatory complexes which in the given language play the rôle of independent simple syntactical subunits, i. e., words (cf. *infra*, beginning of § 2), the second to those which—always from the syntactical standpoint—are to be considered as groups consisting of two words at least.

We have obtained, then, the following increasing order of values applicable to articulatory subunits and units, whether simple or complex: 1. functional indifference; 2. functional passivity; 3. functional activity (morpheme); 4. word; 5. word-group; —all of them in the sense above indicated; the first three belong to morphology *sensu lato*, the last two to syntax. Thus the criterion of functional classification has got such a degree of generality as it is necessary, in my opinion, for a functional qualification of any articulatory unit, whether simple or complex, to be met with in Chinese, both archaic and modern, as well as for a characterization of the main line of its typological evolution; to show this shall be my objective in the following paragraphs.

Finally, let it be remarked that the above quinary scheme of functional values embracing the whole of articulatory material, as developed by me from Prof. Doroszewski's functional classification of phonemes, is but a projection onto the functional plane of the most natural and commonly accepted stock of notions corresponding to linguistic units empirically given. It finds, e. g., a close though less developed parallel in the order of linguistic units established for Chinese by Ivanov and Polivanov in their *Grammatika*: звук (фонема), морфема-слог, слово and словосочетание.

§ 2. Before I proceed to a more detailed characterization of modern spoken Chinese (or strictly speaking its Northern, in particular Pekinese, representative⁸) according to the functional

⁸) I am not incorrect while speaking on further pages of modern Chinese in general and exemplifying my arguments by means of linguistic material drawn from a single modern Chinese dialect, viz. Pekinese. It is perfectly well known that modern Chinese dialects, strongly differentiated as they are, differ widely in pronunciation (i. e. from the standpoint of descriptive phonetics) as well as in the use of auxiliaries and pronouns while the vocabulary and particularly what can be termed the 'morphological structure', here of paramount importance, are largely the same. On the other hand, Pekinese being practically equal to the so-called *Kuo-yü* [4] or Chinese National Language may more justifi-

criteria sketched in the foregoing, I want first to lay the strongest stress on the fact of its being a polysyllabic language as far as words are concerned. In this connection let it be noted that by the term 'word' I mean the syntactical and semantical subunit of the living speech, i. e., the articulatory complex endowed with sense and, on principle, directly intelligible to the hearer when orally reproduced in isolation (without any spoken context) by the speaker. Defective as the above definition is from the point of view of general linguistics (e. g. it does not pay attention to the word-stress, the problem of stress—although one of prime importance—being deliberately left out of consideration in the present paper⁹⁾), it is none the less sufficient to qualify most modern Chinese monosyllables (i. e. elements of speech corresponding to single characters of the Chinese script), unintelligible to the ear when orally reproduced in isolation, as mere constitutive elements of modern Chinese words, not words proper¹⁰⁾. In characterizing modern colloquial Chinese as a polysyllabic language in the sense above indicated I am in accord with most modern scholars who have written on this subject, viz. (in chronological order): Ivanov and Polivanov, D. Carr¹¹⁾, P. Me-

fiably than any other dialect be considered as representing modern Chinese in general (cf. Liu Fu [5], *Les mouvements de la Langue Nationale en Chine*, Paris 1925, pp. 14 and 20—22; and D. Carr, *Characterization*, p. 42).

⁹⁾ Cf. *infra* § 5, pp. 407—408, footnote 66.

¹⁰⁾ The criterion of intelligibility, excluding the consideration of most Chinese monosyllables as words, was largely resorted to more than one hundred years ago by A. Bazin in his *Mémoire sur les principes généraux du chinois vulgaire*, repr. from *Journal Asiatique*, Paris 1845: "...un monosyllabe chinois, isolément articulé, prononcé comme on voudra, et de quelque manière qu'on le prononce, n'excite d'ordinaire aucun sens dans l'esprit; principe qui n'est ni une supposition, ni un rêve, mais un fait..." (p. 95; cf. also pp. 63, 67, 69 and 105). It seems striking that such a sound opinion was expressed by a scholar who had never been in China!

¹¹⁾ See his *Characterization* quoted above, p. 373, footnote 1, and *The Polysyllabicity of the Modern Chinese "National Language"*, RO X (1934), pp. 51—76.

riggi¹²), W. Jabłoński¹³), the Chinese writer Tchen Ting-ming (in our spelling Ch'en Ting-min [6])¹⁴), P. Serruys¹⁵),

¹²) See his *Sur la structure des langues »groupantes«*, *Psychologie du langage*, Paris 1933, pp. 185—216. This interesting typological study has the disadvantage of disregarding the peculiar functional rôle of the syllable in Chinese; cf. further remarks in the end of this paragraph.

¹³) Cf. his characterization of the language of the modern popular songs in *Les »siao-ha(i-eu)-l-yu« de Pékin*, *Mémoires de la Commission Orientaliste de l'Acad. Polon. des Sc. et des Lettr.* 19, Kraków 1935: "Il est vrai que la langue des *siao-ha(i-eu)-l-yu*, le pékinois moderne, est loin d'être une langue monosyllabique... Les idéogrammes isolés ne forment pas nécessairement des mots indépendants, mais même dans les complexes polysyllabiques... on peut les concevoir comme des éléments distincts sémantiquement ou morphologiquement" (pp. 44—45; expatiated by me).

¹⁴) See his *Etude phonétique des particules de la langue chinoise*, Paris 1938, which contains an introductory chapter discussing the problem in question. Though the book calls forth some reservation it must be considered an important contribution as it represents the standpoint of a Chinaman having necessarily a direct feeling of the language which is his own.

¹⁵) Cf. his *Philologie et linguistique dans les études sinologiques*, *Monumenta Serica* VIII, Peking 1943, pp. 167—219. Father Serruys considers the traditional »monosyllabic« conception of Chinese as a "postulat commode, basé sur l'écriture et qui n'a jamais fait l'objet d'une étude linguistique sérieuse", and states: "L'étude d'un dialecte vivant, faite sur des matériaux vivants, rassemblés objectivement et sans égard à l'écriture, prouve que les dialectes chinois ne sont pas plus monosyllabiques ni moins polysyllabiques qu'une autre langue" — p. 206. This, however, seems to misjudge the morphological rôle of the syllable in Chinese. The impression is confirmed by what is said in Father Serruys's *Fifteen Popular Tales from the South of Tatung (Shansi)*, *Folklore Studies* V, Peking 1946, p. 199, where the writer adduces as an example an English sentence mechanically cut into syllables; such a segmentation, in the writer's opinion, is to represent something "written according to a script like that of Chinese". The comparison is a complete failure as the segmentation into syllables in an Indoeuropean language—in contradistinction to Chinese—has, on principle, nothing to do with morphological analysis; cf. further remarks in the end of this §.

W. A. Grootaers¹⁶), V. Skalička¹⁷) as well as the well-known Chinese linguistic scholar Yuen Ren Chao (Chao Yüan-jen [7])¹⁸). P. Demiéville in a lecture held in 1944 adopted a very prudent attitude with regard to polysyllabism in Chinese while he underlined the twofold nature of the Chinese language¹⁹);

¹⁶) See his studies: *La géographie linguistique en Chine*, Mon. Ser. VIII, pp. 103–166; *id.*, 2^e Partie, Mon. Ser. X, 1945, pp. 389–426; and *Différences phonétiques dans les dialectes chinois*, Mon. Ser. XI, 1946, pp. 207–232. In all these papers the principle of polysyllabicity of words is clearly implied, although not explicitly stated.

¹⁷) See his *Sur la typologie de la langue chinoise parlée*, Archiv Orientální XV, 3–4, Praha 1946; pp. 386–412. The writer states: “Le caractère monosyllabique du chinois qui, tout de même, ne saurait être contesté, ne s’attache en réalité qu’aux morphèmes, c’est-à-dire aux moindres groupements de lettres [sic! a lapsus calami? — J. Ch.] qui sont encore pourvus de sens” (p. 395). A very sound opinion, too, is expressed with regard to Meriggi’s standpoint which “ne saurait non plus résoudre tous les problèmes de la typologie du chinois, n’étant basé que sur la syntaxe et l’ordre des mots” (p. 387); cf. *supra* p. 380 footnote 12, and *infra* in the end of this paragraph.

¹⁸) Cf. Yuen Ren Chao and Lien Sheng Yang (Yang Lien-sheng [8]), *Concise Dictionary of Spoken Chinese*, Cambridge, Mass. 1947, in which “all entries are treated as morphemes” (p. vi) as well as Chao’s remarks in his *Cantonese Primer*, Cambridge, Mass. 1947, p. 37. The latter work furnishes us with extensive empirical material the analysis of which shows that the Cantonese dialect is much like Pekinese from the typological point of view, in spite of the fact that the two are to be considered as the very opposite poles of Chinese dialectal differentiation; cf. *supra* p. 378, footnote 8.

¹⁹) See his *Le Chinois à l’Ecole Nationale des Langues Orientales Vivantes*, chapter I: *Initiation à la langue chinoise*, Cent-cinquantième de l’Ecole des Langues Orientales, Paris 1948, pp. 129–152. Prof. Demiéville states that polysyllabism “n’est effectivement qu’un aspect, un des aspects, de la lexicalité chinoise” (p. 132); in Chinese “l’unité lexicale, monosyllabique en principe, oscille sans cesse, dans la pratique, entre le monosyllabe et le polysyllabe” (p. 137), and “tous les éléments lexicaux tendent à s’affranchir du monosyllabisme” (p. 142). He analyses, too, semantical and morphological as well as phonetical reasons for which Chinese *composita* are to be considered as polysyllabic words (pp. 135–136).

so also did C. Regamey²⁰). On the other hand, there are distinguished scholars, the very founders of Chinese linguistics, who used to lay stress on the monosyllabic character of Chinese: B. Karlgren²¹) and H. Maspero²²). I think, however, that the discrepancy between the two standpoints is more apparent than real and will disappear as soon as notional and terminological questions have been settled²³).

²⁰) See his *Langues d'Extrême-Orient — Essai de caractéristique*, Etudes Asiatiques, Revue de la Société Suisse d'Etudes Asiatiques, Berne 1947, pp. 48—71. Prof. Regamey after having adduced several examples of Chinese compound words underlines the word-formative (i. e. morphological) character of composition in Chinese: "Ces faits sont archiconnus, mais on ne se rend pas toujours compte que ce ne sont plus des groupes syntaxiques, mais de nouveaux mots dis-syllabiques" (p. 52). The above, however, does not mean, in the writer's opinion, that Chinese has already become a polysyllabic language: "Le chinois moderne n'est .. pas encore devenu une langue polysyllabique ou flexionnelle, mais il est faux d'affirmer qu'il est exclusivement monosyllabique et qu'il ne marque formellement aucun rapport grammatical" (p. 53).

²¹) Cf. his *Sound and Symbol in Chinese* (1st ed. 1923), London 1929, pp. 20—24 and 32—34; *Philology and Ancient China*, Oslo 1926, p. 13; and his recent book *Från Kinas Språkvärld*, published in the series Göteborgs Högskola Forskningar och Föreläsningar, Stockholm 1946. This latter book has been accessible to me through a manuscript copy of its unpublished English translation made by A. F. P. Hulswé, Sinologisch Instituut of Leiden, to whom I express my best thanks.

²²) See his *La langue chinoise* referred to above, p. 372, footnote 1, and *Les langues d'Extrême-Orient*, Encyclopédie Française, tome I^{er}, Paris 1937. In the latter paper the eminent sinologist starts his characterization of the Chinese language: "Tous les mots chinois sont d'une seule syllabe..." (p. 140—2).

²³) To make the bibliographical list more complete, though by no means exhaustive, I will mention G. Margouliès and H. Frei. The former's book *La langue et l'écriture chinoises*, Paris 1943, in its linguistic part has nothing in common with either the science of language in general or Chinese linguistics in particular; there is, consequently, no need to dilate on the strictly traditional and »monosyllabic« standpoint of the writer. As to Prof. H. Frei — it is not easy for me to qualify his views concerning the problem in question. In *Monosyllabisme*

It stands to reason that the principally polysyllabic (in most cases dissyllabic) structure of words in modern spoken Chinese does not exclude the fact that words (in the sense above indicated), too, are met with which consist of a single syllable; nor is the polysyllabism of modern Chinese words invalidated by the fact that every modern Chinese monosyllable is in itself, as a rule, a morphologically significative unit, i. e., morpheme²⁴). Monosyllabism of morphemes is not to be confused with that of words; with regard to the former modern Chinese is a monosyllabic language, with regard to the latter it is not²⁵).

In order to provide the reader with the necessary linguistic material upon which the functional characterisation shall be based I am going to set up a few series of 'cognate' (i. e.

et polysyllabisme dans les emprunts linguistiques, Bulletin de la Maison Franco-Japonaise, tome VIII, No. 1, Tôkyô 1936, pp. 77—164, he seems to have adopted "l'opinion traditionnelle qui considère le chinois, écrit et parlé, comme une langue monosyllabique" (p. 82); in his critical review of Tchen's *Etude phonétique* (Acta Linguistica I, 2, Copenhagen 1939; pp. 119—123) he admits, however, the existence of dissyllabic 'monemes' in modern Chinese. He does the same in his paper *Qu'est-ce qu'un Dictionnaire de phrases?* (Cahiers Ferdinand de Saussure I, Genève 1941, pp. 43—56) where he suggests, too, to replace "la notion évasive du mot, scientifiquement insaisissable, par celle de monème..." (p. 52), a 'moneme' being "tout signe dont le signifiant est indivis" (p. 51). According to him the problem of polysyllabism in Chinese is to be solved only by means of statistics which will be possible after his *Peiping Sentences* have been published (See Acta Ling. I, 2, p. 120). — Let it be noted that statistical methods were largely resorted to by Carr in *Polysyllabicity*, published in 1934.

²⁴) D. Carr, *Characterization*, pp. 49 ff. and 67 calls the monosyllabic constituents of modern Chinese words — 'logoids', the term itself being borrowed from Rozwadowski; Tchen Ting-ming, *l. c.*, p. 24, speaks of 'syllabes significatives'.

²⁵) Cf. Ivanov and Polivanov, *Grammatika*, p. 21: "... к разговорному (современному) кит. языку понятие моно-силлабизма применимо только в смысле типичной односложности морфемы, но не односложности слова".

constituting one 'word family') modern Chinese words. Let it parenthetically be noted that the term 'word family' has been used here in a wider sense than it generally has in Indo-European linguistics: it means here a group of words connected with one another by any semantical and at the same time morphological, in particular compositive or derivative, bond. The choice of examples has been rather accidental and I have never thought of exhausting any of the series. The reader, of course, will not be surprised at the fact that in most cases English equivalents of Chinese words adduced are not 'cognate' to each other. For typographical reasons it has not been possible to insert the Chinese characters into the text; they are throughout represented by numbers in brackets [] referring to the respective character or characters in the Index of Chinese characters given in the end of this paper. The transcription is that adopted for modern Chinese by Karlgren, differing in some points from the official English Wade system; it has been based on the Pekinese pronunciation²⁶). Tones which are not dealt with in this paper have not been indicated. Elements recurring in every specimen of one and the same series and constituting thus the necessary morphological bond between the words considered as cognate have been set in boldface italics; the reader is asked to remember that the syllables thus marked are not necessarily those stressed in actual pronunciation.

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|----|-------------------------|------------------------|--------------------------------|--------------------------|---------------------------|
| 1. | [9] | [10] | [11] | [12] | [13] |
| | <i>hüe</i> | <i>hüe-la</i> | <i>hüe-kuo</i> | <i>hüe-ti</i> | <i>tung-hüe-ti</i> |
| | 'to learn' | 'to have
learned' | 'to have studied
it before' | 'learned' | 'school-mate' |
| | [14] | [15] | [16] | [17] | [18] |
| | <i>hüe-sheng</i> | <i>hüe-hiao</i> | <i>hüe-hiao-li</i> | <i>hüe-wen</i> | <i>ta-hüe</i> |
| | 'pupil' | 'school' | 'at school, loc.' | 'learning,
erudition' | 'university' |

²⁶) It must, however, be noted that I put *i* wherever Karlgren has *yi* in order to show clearly the possibility of simple syllable-forming phonemes doing the morphological job of syllables, cf. *infra* p. 388.

2. [19] [20] [21] [22] [23]
kiao kiao-yü kiao-hün kiao-shü kiao-yüan
 'to teach' 'to educate; education' 'instruction' 'teacher' 'id.'
- [24]²⁷⁾ [26] [27]
tsung-kiao kiao-huei kiao-shü
 'religion' '(Christian) mission' 'missionary'
3. [28] [29] [30] [31] [32]
siang siang-cho siang-i-siang siang-tao siang-hui-lai
 'to think' 'to be thinking' 'to make a reflexion' 'to anticipate, think of' 'to recall'
- [33] [34] [35] [36] [37]
siang-k'i-lai siang-yao siang-t'ou si-siang i-siang
 'to call to mind' 'to intend' 'expectations, hopes' 'thoughts' 'thinking, imagination'
- [38] [39]
siang-siang siang-siang-ti
 'imagination' 'imaginary'
4. [40] [41] [42] [43] [44]
yung kung-yung yung-kung wu-yung-ti yung-huai-la
 'to use' 'achievements' 'to work hard' 'useless' 'worn out (by use)'
- [45]²⁸⁾ [52]
yung-ch'u yu-yung-(ch'u)-ti
 'use, utility' 'useful'

²⁷⁾ This word, commonly used in modern Chinese, has not been coined by the Chinese themselves, but is a borrowing from the Sino-Japanese: [24] pron. *shūkyō*. It was criticised by K'ang Yu-wei [25] as a misleading term; it is, however, quite in the line of modern Chinese word-formation and for this reason could be adduced here. Let it be remarked that Sino-Japanese treats the Chinese monosyllables in much the same way as modern Chinese does, i. e. as simple morphological constituents of words, not words proper.

²⁸⁾ This word is attested in a Buddhist text written in spoken Chinese and dating back as early as the 9th cent. of our era, see H. Maspero, *Sur quelques textes anciens de chinois parlé*,

5. [53] [54] [55] [56] [57]
wo **wo-ti** **kei-wo** **wo-men** **wo-men-ti**
 'I' 'my, mine' 'mihi, dat.' 'we' 'our, ours'
6. [48] [58] [59]
hai-ch'u **yu-hai-ti** **shang-hai**
 'harm' 'harmful' 'to do harm, hurt'
7. [60] [61] [62] [63] [64]²⁹⁾
ch'i-t'ou **ch'i-tsie** **ch'i-kia** **ch'i-cho** **ch'i-la**
 'finger' 'phalanx' 'finger-nail' 'to point at' 'to have pointed at'
8. [65] [66] [67] [68] [69]
kung-tso **tso-kung** **pa-kung** **kung-ye** **kung-ch'ang**
 'work, job' 'to work' 'labour strike, to go on strike' 'industry' 'factory'
- [70] [71] [72]³⁰⁾
kung-jen **kung-ts'ien** **kung-huei**
 'workman' 'wages' 'trade-union'
9. [73] [74] [75]³¹⁾
kan-küe **kan-ts'ing** **kan-tung**
 'to feel' 'feeling, emotion' 'to affect, to move'

Bulletin de l'Ecole Française d'Extrême-Orient XIV, 4 (Hanoi 1914), p. 16: [46] *sü che-ko kien-kie yu shen-ma yung-ch'u?* 'What is the use of such explanations?' It may be considered as representative for the whole class of nouns having the word-formative suffix *-ch'u* [47], e. g. [48] *hai-ch'u* 'harm' (cf. *supra*, series 6); [49] *nan-ch'u* 'difficulty'; etc. For examples of word-formation with suffixes *-tsi* [50] and *-t'ou* [51] in spoken Chinese of the 9th century, see Maspero, *ibid.*, p. 12.

²⁹⁾ With the exception of [62] *ch'i-kia* the words of this series have been drawn from H. Maspero, *Les langues d'Extrême-Orient* in *Encycl. Française* I, p. 1:40—5.

³⁰⁾ Most examples of series 8 have been taken from Tchen Ting-ming, *Etude phonétique*, p. 26.

³¹⁾ All the three words have been taken from Chao and Yang, *Concise Dictionary of Spoken Chinese*, p. 83.

In connection with the instances given above the critical reader may object that they do not offer any homogenous material, on the contrary, embrace facts morphologically quite different as nominal suffixal formations of purely derivative kind (e. g. [45] *yung-ch'u*, [60] *ch'i-t'ou*, etc.), nominal and verbal affixal formations of agglutinative type (e. g. [10] *hüe-la*, [12] *hüe-ti*, [55] *kei-wo*, etc.) as well as compositions *sensu stricto* (e. g. all instances in series 8)³²; this, however, has been in perfect accord with my intention to adduce phenomena relating to the whole of modern Chinese word-formation without making any attempt at their further differentiation. Now, in all the above examples, heterogenous in kind as they are (and it must be remembered that each series might be fairly prolonged and an indefinite number of analogous series might be set up just as well), one is certainly struck by the following fact: no modification of any modern Chinese word such that the new word thus created remains within the same word family (in the widest sense of this term, as indicated above, p. 384) that is to say, in other words, no living morphological process in modern Chinese is developed by adding or interchanging single phonemes or non-syllabic combinations of phonemes inside or outside the stem-word affected, as it is the rule in Indoeuropean and Semitic languages; on the contrary, exclusively whole syllables are interchanged in morphological processes, in some cases there occurring interchanges of the kind: *syllable* : *syllabic* Ø or *vice versa*³³. Even if there occur, sporadically,

³²) It must be remarked here that compound words consisting of members being themselves actually independent semantical and syntactical subunits and apt to be used as such in the living speech are comparatively few in modern Chinese; many 'compositions' may to be regarded as such but from the diachronical point of view. Cf. Carr's remarks on compounds of the [76] *fu-ts'in* type in *Polysyllabicity*, p. 70.

³³) The above statement sounds much like the following quotations from Ivanov's and Polivanov's *Grammatika*: "... к европейским языкам применимо положение, что слова формируются из звуков (или звукопредставлений) как таковых. Для китайского же языка нужно было бы сказать, наоборот, что слова формируются из слогов (или слогопредставлений)", p. 4; and

words with single phonemes as constituents capable of being interchanged in morphological processes, as e. g. in [37] *i-siang* (see p. 385, series 3) this is exclusively confined to a few syllable-formative phonemes, which actually stand there in their quality of syllables, not of phonemes³⁴). On the other hand, those syllables are at the same time irreplaceable sound elements in given word-structures which together with what has been stated above constitutes the two characteristics of subunits

further: "... для того, чтобы изменилось значение слова, нужна замена (чередование) целого слога другим целым слогом, а недостаточно изменить (по определенной формуле, как это имеет место в европейских языках) один из составных элементов слога (звук) другим звуком...", pp. 4—5. It is evident that the authors of the *Grammatika* while speaking of altering the sense of words mean word alterations within a given word family, though they do not say it expressly; without such a reservation their assertion would be untrue. Let us take, for instance, the common modern Chinese word [77] *shī-t'ou* 'stone' and replace the initial phoneme *š* (written *sh* in our spelling) by the corresponding voiced phoneme *ž* (written *j*): we get (tones being left out of consideration) the word [78] *jī-t'ou* 'sun'. Thus we have managed altering the sense of a word by means of replacing one single phoneme by another, but the result obtained is an entirely different word having etymologically nothing in common with the former; in other words we have done an extra-morphological job, not a morphological one. This only points to the fact that the phonemes *š*, *ž* are irreplaceable sound elements of words containing them, i. e., that they are passive from the functional point of view, cf. *infra* p. 389. Needless to say that the lack of etymological bond between the two words in question is not invalidated by the fact that they are similar in structure and have the same suffixal morpheme *-t'ou* [51] in common (cf. in English, e. g., *friendship* and *scholarship* which evidently are not cognate words in spite of having the same word-formative suffix *-ship* in common).

³⁴) This may be seen from the fact that considered from the diachronical point of view they are archaic syllabic complexes simplified in the course of centuries in their phonetical structure and reduced to simple phonemes in modern Chinese; e. g. the *i* [79] in question is an archaic **iag > *i > i*, see Karlgren, *Grammata Serica*, p. 379, character 957 a. — For instances of prefixal *a-* [80] in the language of the 9th century see Maspero, *Sur quelques textes anciens*, p. 13.

functionally active, according to the definitions given in § 1. Thus we have empirical as well as formal reasons to consider syllables—and syllables only—as articulatory subunits functionally active in modern spoken Chinese; for the simplest phonetic elements, i. e., phonemes (acting in their quality of phonemes, i. e., simple articulatory constituents of syllables), consequently, there remain only two lower functional values: passivity and indifference. Indeed, in spite of their not participating in morphological alternations the overwhelming majority of Chinese phonemes are, none the less, irreplaceable simple sound-elements in given word structures so that—within the bounds of one and the same dialect—any replacement of a single phoneme by another, may it be the most similar in articulation, produces an entirely different word having etymologically nothing in common with the former (as in the case adduced above, p. 388, footnote 33) or an articulatory complex not existing in the lexical stock of the language. Only a few variants of phonemes, e. g. sonorized plosives and affricates, make an exception to the above rule and play no functional rôle whatever³⁵). It is obvious that the former category will be termed phonemes functionally passive, the latter phonemes functionally indifferent, according to the definitions given in § 1. Phonemes functionally active, on principle, do not exist in modern Chinese.

Considering the polysyllabic (in most cases dissyllabic³⁶) structure of modern Chinese words it goes without saying that

³⁵) The phenomenon of sonorizing Pekinese unaspirated plosives standing inside a dissyllabic complex was experimentally investigated by me in 1939 and the results summarized in my paper *A Quantitative Characterization of Chinese Plosives* (unpublished). In that paper an attempt was made for the first time at applying functional terminology for characterizing Chinese phonemes and sonorized plosives were termed 'functionally indifferent'.

³⁶) The statistically predominant dissyllabicity of modern Chinese words has been underlined by Ivanov and Polivanov: "В виде доминирующей нормы единица следующего порядка за „морфемой-словом“, т.е. слово современного кит. яз. будет состоять по крайней мере, из двух морфем-слов; иначе говоря, двух-морфемно-двусложный состав явится статистически доминирующей нормой для китайских слов простого (нормального) состава..." (op. c., p. 7).

what is to be termed a syntactical word group in modern spoken Chinese will normally consist of more than two syllables. None the less, as there are also monosyllabic words, though comparatively few, dissyllabic (i. e. consisting of two monosyllabic words) word-groups and even propositions are not excluded; they cannot, however, be considered as a norm.

Thus, for modern spoken Chinese we have obtained the following order of articulatory units ranked with regard to their increasing functional value:

functional indifference	functional passivity	functional activity (morpheme)	word	word-group
variants of phonemes	phonemes	syllables	dissyllables (polysyllables)	(dissyllables) polysyllables

The above is the general typological qualification of modern spoken Chinese made according to the functional criteria and this is exactly what we want for purposes of comparison with the archaic stage. I will, however, add a few remarks more which, although not strictly necessary for further discussion, are none the less directly connected with what has been exemplified and stated above, and supposedly will not be out of place in the present characterization.

The principle of functional activity of syllables (and syllables only) and that of functional passivity of phonemes as stated in the foregoing jointly imply the principle of grouping invariable syllabic morphemes as the only morphological device possible in modern spoken Chinese; this is exactly the reason for which I consider P. Meriggi's suggestion to replace the traditional and misleading term of 'isolating languages' by that of 'grouping languages'³⁷⁾ to be a very happy one. Let it, however, be noted

³⁷⁾ See his *Sur la structure des langues »groupantes«*, referred to above, p. 380, footnote 12.

that my standpoint is fairly different from that of Meriggi. The latter's view may be summarized in his own words: "... dans les langues indochinoises modernes, c'est le *groupement des mots*, avec la subordination phonétique et sémantique qu'il entraîne avec soi qui forme leur véritable grammaire, l'essence de leur type" (*l. c.*, p. 189; italicized by M.) and this points out clearly that he considers the grouping, first of all, as a syntactical process³⁸). In contradistinction to him I want to lay the strongest stress on the morphological character of the grouping of monosyllabic morphemes into words in modern Chinese³⁹) which, of course, does not exclude nor invalidate the parallel syntactical phenomenon of grouping words thus constituted into word groups or propositions, nor the peculiar unity of morphology and syntax existing in modern spoken Chinese and due to the fact that the general rules governing the grouping of morphemes into words as well as that of words into word groups are largely the same⁴⁰). Thus Meriggi's terminological suggestion seems to be of much greater value than he realized it himself as the new term characterizes adequately both morphology and syntax in modern Chinese; it deserves, then, general acceptance.

§ 3. Researches in the field of historical phonetics of the Chinese language brilliantly started some thirty years ago by Bernhard Karlgren (the first part of his epoch-making work *Etudes sur la phonologie chinoise* appeared in 1915; *ibidem*

³⁸) He speaks expressly of a 'groupement syntaxique', *l. c.*, p. 198. It must have been this preoccupation with syntax which caused Meriggi to overlook the peculiar morphological rôle of syllable in Chinese.

³⁹) It is not without interest that Tchen Ting-ming who knows Meriggi's paper seems to have understood the 'grouping' as a word-formative (i. e. morphological) process; cf. *Etude phonétique*, pp. 27 and 40.

⁴⁰) Cf. Ivanov and Polivanov, *op. c.*, pp. 21 — 22; P. Demiéville, *op. c.*, p. 133, states expressly that Chinese compound words "mettent en oeuvre les principaux procédés syntaxiques dont dispose la langue: coordination, subordination, rection...". Cf. also my remarks *infra* at the end of § 4.

the reader will find particulars on attempts in the same field made by others prior to Karlgren) and since then continuously pursued by himself and other scholars Western (H. Maspero, W. Simon, A. Dragunov) and Chinese (Lin Yü-t'ang [81], Li Fang-kuei [82] and others) advanced our knowledge of the past of that language to an extent which could hardly be expected. They led, at first, to a fairly satisfactory reconstruction of the phonetic garb of the language of the 6th cent. of our era (Ancient Chinese in Karlgren's terminology) which has already become *bonum commune* of sinological science; subsequent researches in the same field, especially those pursued by Karlgren during the last years of the pre-war period, bearing upon the *Shi King* [83] rimes and the *hie-sheng* [84] characters of the Chinese script, in their turn, resulted in furnishing us with the reconstruction of Chinese phonetic system (which throws considerable light on the morphological system) for a period dating back as early as the Chou dynasty, i.e., the first millennium B. C. (Archaic Chinese in Karlgren's terminology)⁴¹. It is exactly this oldest stage of the Chinese language as recently reconstructed by Karlgren which in the present paragraph shall be characterized from the typological point of

⁴¹) In this connection the following works of Karlgren's should particularly be noted: *Shi King Researches*, The Bulletin of the Museum of Far Eastern Antiquities No. 4, Stockholm 1932, pp. 117—185; *Word Families in Chinese*, *ibid.*, No. 5, 1934, pp. 9—120, (cf. Maspero's critical review in Bulletin de la Société de Linguistique de Paris XXXVI, 3, 1935, pp. 175—183); *On the Script of the Chou Dynasty*, *ibid.*, No. 8, 1936, pp. 157—178; and his monumental work *Grammata Serica* (referred to *infra* as KGS), *ibid.*, No. 12, 1940, pp. 1—471 (cf. P. Demiéville's critical review in Bull. Soc. Ling. Paris XLIII, 2, 1947, pp. 139—144). An excellent popular survey of both methods of investigation adopted and results obtained as well as instances of practical application of those results to the interpretation of obscure passages in early Chinese literary monuments have been given by the eminent scholar in his *Från Kinas Språkvärld*, referred to p. 382, footnote 21. — The reconstruction of the archaic stage of Chinese was started by Karlgren in the introduction to his *Analytic Dictionary of Chinese and Sino-Japanese*, Paris 1923.

view and in the following one compared with the modern stage to allow us the characterization of the typological evolution the Chinese language went through in the course of the past three millennia or so.

It is, however, to be remembered that because of the specific structure of both Chinese language and script, which latter but indirectly and fragmentarily informs about the pronunciation, as well as because of comparative Indo-Sinitic linguistics being but in its very beginnings, the results of those reconstructions, ingenious as they are, remain hypothetical and in some particular cases are subject to serious reservations. To show the reader the divergence of opinions with regard to certain problems connected with the reconstruction of archaic Chinese let us quote one example only, viz. the question of initial consonant groups of the type *plosive + l* entirely lacking in all modern Chinese dialects. The existence of initial groups of this kind in archaic Chinese is beyond any doubt as it may be deduced from certain categories of the *hie-sheng* characters and corroborated by comparison with other languages of the Indo-Sinitic family, especially those of the T'ai group, closely akin to Chinese, which in this respect conserved their archaic phonetism better than Chinese did. So far so good; but with regard to the origin, the morphological character of these groups as well as their subsequent evolution, the opinions vary considerably. Karlgren himself expressly states that his "reconstruction of the Archaic initials is more liable to show lacunes than that of the Archaic finals" (KGS, p. 16; cf. also *Word Families*, p. 56); he supposes that in groups of *plosive + l* type either the plosive was dropped or the liquid according to whether the plosive was or was not an unaspirated media, thus, e. g., **bl- > l-* but **pl- > p-*, **gl- > l-* but **kl- > k-*.⁴²⁾ Maspero⁴³⁾ considers the archaic initial groups *plosive + l* as secondary, not primary, proceeding from the primary liquid *l* plus prefixal plosive subsequently added; later on the *-l-* was dropped, the prefixal plosive remaining alone as

⁴²⁾ Cf., e. g., KGS p. 176, No. 178; pp. 324—325, No. 766.

⁴³⁾ See his *Préfixes et dérivation en chinois archaïque*, Mémoires de la Société de Linguistique de Paris XXIII, 5, 1930, pp. 313—327.

initial consonant: $*l > *plosive + l > plosive$; he does not admit of groups of this kind developing into l , thus in cases of an initial l - in ancient and modern Chinese we have to reconstruct: $l < *l$. Contrarily to Maspero the Danish scholar K. Wulff on the basis of comparative investigations upon linguistic material drawn from Siamese and other languages of the Tai group (the whole group being undubitably genealogically akin to Chinese) suggested the consideration of the archaic initial groups of the $plosive + l$ type as consisting of primary initial plosive plus infixal $-l-$ subsequently added.⁴⁴) Finally let it be remarked that the problem of initial groups other than those of $plosive + l$ type, e. g., $sn-$, $tn-$ suggested by W. Simon in his paper *The Reconstruction of Archaic Chinese* (Bull. of the School of Oriental Studies IX, London 1937-1939; see pp. 285-288), seems still more obscure and liable to discussion; the more so P. A. Boodberg's theory of 'consonantal clusters' (see *infra*, p. 411, footnote 73).

These and like controversies, essential as they seem, are fortunately not of paramount importance to the purpose pursued in this paper. Irrespective of the plosive being a word-formative (derivative) prefix or the liquid an infix the fact is beyond any doubt that in archaic Chinese single phonemes were interchanged inside monosyllabic words in morphological (word-formative, derivative) processes and that such alternations closely resembling the phenomenon of "internal flexion" in Indo-European and Semitic languages were of fundamental importance.⁴⁵) This can be positively ascertained with regard to

⁴⁴) See his *Chinesisch und Tai*, Det Kgl. Danske Videnskabsnernes Selskab, Historisk-filologiske Meddelelser XX, 3, København 1934. The reader is particularly referred to Chapter V: *Spuren der wortbildung mit infixen im chinesischen*, pp. 211 ff.; cf. Maspero's criticisms in his review of Wulff's book in Bull. Soc. Ling. Paris XXXVI, 3, 1935, pp. 183-187. — Further examples of hypothetical infixation (after nasals) are given in Wulff's paper *»Musik« und »Freude« im Chinesischen*, published in the above series XXI, 2, København 1935, pp. 25-26.

⁴⁵) Under 'fundamental importance' of sound-alternations in archaic Chinese I mean the fact that in most cases (the disputable problem of affixation as well as that of tone alternations set

many archaic Chinese phonemes, vowels and consonants as well. Extensive material has been collected by Karlgren in his *Word Families in Chinese*, pp. 60—97, and synthetically worked up *ibid.*, pp. 98 ff., cf. also KGS, pp. 457—459. Let us pick only one example out of the many: monosyllable [9], pronounced in modern Pekinese *šüe* (written *hüe* in our spelling, cf. *supra*, § 2, p. 384, series 1) means 'to learn, study'; monosyllable [19], pron. *čiao* (written *kiao*, cf. p. 385, series 2) means 'to teach, instruct', hence also (with a different tone) 'doctrine'. Now, although the meanings of the two monosyllables are evidently 'cognate' to each other the relation being approximately that of an intransitive to the corresponding transitive verb, total difference of sound in modern (and ancient i. e. 6th cent. of our era) pronunciation along with total diversity of the respective graphical symbols (cf. the characters [9] and [19]) has hidden the fact of the two monosyllables adduced being really cognate words formed up by means of alternations of elementary phonemes inside one and the same stem. The fact becomes evident only in the light of reconstructed archaic pronunciation: [9] pron. *g'ôk*, [19] pron. *kôg* (v. Karlgren, *Word Families*, p. 64, characters Nos. 339 and 342 — characters from 338 to 345 constituting the corresponding word family; cf. also KGS, p. 399, char. 1038 a-c and p. 433, char. 1167 f-l). We evidently face a morphological (derivative⁴⁶) process carried out by means of a double interchange of consonants: initial *g'*

apart) they constituted the exclusive means by which morphological processes were carried out while in the Indoeuropean languages, as it is known, alternations of phonemes inside the stem-word are mostly parallel phenomena to adding or interchanging word-formants outside the stem. What is more, even in Tibetan — a language genealogically akin to Chinese — in its earliest form recorded, i. e., the 'classical' language of the 7th cent. of our era the 'internal flexion', although apparent, is but second in importance to affixation, this latter being the chief vehicle of morphological distinctions, cf. C. Regamey, *Considérations sur le système morphologique du tibétain littéraire*, repr. from *Cahiers Ferdinand de Saussure* VI, Genève 1946—1947, pp. 4—5.

⁴⁶) It does not matter here that in archaic Chinese as P. Demiéville, *loc. c.*, p. 147, very rightly says "les mots apparentés sont sous le régime de la table ronde", i. e., one is unable to see which does derive from which.

(voiced aspirated): *k*, and final *k* : *g* which, in the case adduced, marks the transition from the intransitive to the transitive form of the verb.⁴⁷⁾ I am not going to multiply examples of consonantal alternations or adduce those of vocalic ones; the latter are extremely abundant in archaic Chinese and Indo-Sinitic languages in general, although it has been extremely difficult to find out any regularity or law thereof.⁴⁸⁾ Copious material con-

⁴⁷⁾ In KGS, p. 433, char. 1167 f-l, Karlgren gives a slightly different reading for [19]: *kög*. If so, we have one alternation more and this time a vocalic one, viz. *ô* (short narrow *o* in Karlgren's notation): *ö* (short open *o*), parallel to the alternation of consonants indicated above. In such a case one might object that we have to do with an interchange of whole syllables as the two syllables adduced do not have even a single element in common. There are, however, numerous instances of alternating only one single phoneme in archaic Chinese; I have confined myself to the case of [9] *hüe* and [19] *kiao*, a less clear one, as the two words have been listed in the preceding §, each one on the head of a distinct modern Chinese word family.

⁴⁸⁾ Cf. Wulff, *Chinesisch und Tai*, § 11: "Eine merkwürdige erscheinung sowohl im chinesischen als in den Tai-sprachen (und ebenfalls in der tibetisch-barmanischen gruppe des sprachstammes)... ist der merkwürdig reiche vokalwechsel innerhalb der etymologischen sippen, den wir in all diesen sprachen finden, ein schwanken des vokalismus das... nicht auf lautentwicklung, auf späterer differenzierung ursprünglich gleicher vokale beruht, sondern ein mittel der wortableitung ist..." (pp. 18—19), and further: "Wie die sprachen heute vorliegen, hat es den anschein, als wäre dieses wechseln der vokale völlig regellos und als liesse sich kein prinzip finden, das für den zusammenhang zwischen der vokalisierung und der nuancierung der bedeutung des einzelnen wortes massgebend wäre; jedenfalls ist es bisher nicht gelungen, irgend welche regeln dafür nachzuweisen" (pp. 19—20). The above holds equally good with regard to alternations of consonants, and it was exactly this practical impossibility of establishing any strict rules governing the morphological alternations of phonemes in the archaic language which caused Maspero (in his review of Karlgren's *Word Families*) to exclaim: "Mais à quoi bon rapprocher des mots parce qu'ils se ressemblent par le son et le sens, quand on ne peut jamais expliquer comment ils dérivent les uns des autres?" (Bull. Soc. Ling. Paris XXXVI, 3, p. 182), although he acknowledged Karlgren's word families to have been "dans l'ensemble... formés avec beaucoup de soin" (*ibid.*,

cerning alternations of vowels will be found in Karlgren, *Word Families*, pp. 107—117, as well as *Grammata Serica*, *passim*.

It is clear from what precedes that in the archaic stage of the Chinese language the functional rôle of phonemes, vowels and consonants as well, was quite different from what it has become in modern Chinese. In that remote epoch of the Chinese language phonemes were the elementary articulatory subunits doing a morphological job in words, i. e., in other words, phonetical subunits functionally active⁴⁹) just the same, or even to a still larger extent (cf. *supra*, p. 394, footnote 45), as it has been the case in Indoeuropean languages. One cannot, however, give any answer to the question whether each one of phonemes belonging to the reconstructed phonetical system of archaic Chinese was functionally active, apt to do a morphological job, or if there were also passive phonemes which, though irreplaceable in their quality of sound-constituents of certain word-structures, never took part in morphological alternations. Similarly, the existence of phonematic variants functionally indifferent can be neither ascertained nor denied with regard to the archaic stage, and it is highly

p. 182). Now, those "rapprochements" are in themselves of prime importance from the general and typological point of view as they undeniably show morphological variations inside the words and prove single phonemes to have been functionally active in the archaic language in contradistinction to the modern stage. Quite recently Karlgren insisted on certain regularities of sound alternations in archaic Chinese and gave striking examples thereof, see the tables on pp. 75, 76, 78 in his *Från Kinas Språkvärld*. He gives, e. g., p. 75 (table), a series of words in which alternations of the type *initial unaspirated tenuis: initial aspirated media* mark the transition from the nominal to the verbal sense of the word affected; in other cases, however, alternations of the same kind are used for quite different morphological distinctions, see *ibid.*, table on p. 76.

⁴⁹) The above means about the same as when Karlgren states that "it was self-evident to the Chinese scribe of about 800 B. C. that his language possessed a fully living system of word-formation, in which different grammatical functions were expressed by means of variations in the sound of the word-stem" (*Från Kinas Språkvärld*, A. F. P. Hulswé's English translation).

dubious whether we ever get so complete a picture of the phonetical and morphological system of archaic Chinese as to enable us the answering of this question which, on the other hand, is not one of prime importance.

There remains still one more important question to be answered, viz. that of the functional rôle of syllabic articulatory unit in archaic Chinese, and this is a rather easy task. In archaic Chinese a monosyllabic element of speech, much more complex in its phonetical structure than its respective continuant in ancient (i. e. 6th century) and modern Chinese, must have been, on principle, the elementary semantical and syntactical subunit endowed with its proper sense and directly intelligible to the hearer when orally reproduced by the speaker, i. e., word. It would be useless to develop here all the arguments perfectly known to sinologists, speaking in favour of this assumption; the very nature of the Chinese script is one of the proofs thereof⁵⁰), additional reasons are furnished, e. g., by an analysis of the rythm of the *Shi King* [83] odes⁵¹) dating back as early as ca. 8th century before our era. It must, however, be remarked that the above assertion holds good not without a certain reservation as in the very text of the *Shi King* we find a considerable number of reduplicated dissyllabic expressions (always written by means of two monosyllabic characters) which seem to invalidate the principle of monosyllabicity of Chinese words even for the archaic period.⁵²) This difficulty, however, is more apparent than real, as those dissyllables, mostly if not exclusively of onomatopoetic character and hence very rightly referred to by Granet as 'auxiliaires descriptifs' or 'peintures vocales'⁵³) are, properly speaking, something lying outside the morphological system of the language; concluding from their existence the dissyllabicity of words in

⁵⁰) Cf. KGS, p. 1: "It was monosyllabism that encouraged the creation of word-characters as against an analytical sound-script".

⁵¹) See Karlgren, *Philology and Ancient China*, pp. 22 ff.

⁵²) A selective list of those expressions was given by M. Granet in his *Quelques particularités de la langue et de la pensée chinoises*, *Revue Philosophique* LXXXIX, Paris 1920; v. pp. 114—117.

⁵³) See *ibid.*, p. 117.

archaic Chinese would be just as inadmissible from the methodological point of view as demonstrating the polysyllabicity of words in modern Chinese by adducing "words" of the kind [85] *hi-hi ha-ha* (common onomatopoea of laughter). On the other hand, we find in the *Shi King* and other old texts a certain number of dissyllables morphologically indecomposable (names of certain birds, plants, etc.; they, too, are always written with two characters of the Chinese script) which constitute a much greater difficulty than the 'auxiliaires descriptifs'; in anticipation of what will be written in this respect in § 5 I will say that, in my opinion, they are to be considered as mere exceptions not invalidating the general principle of monosyllabicity of words in archaic Chinese.

Finally, let it be noted that the principle of monosyllabicity of words in archaic Chinese directly implies that of dissyllabicity of elementary syntactical word-groups (i. e. groups consisting of two words) of any kind.

Summarizing the contents of the present paragraph in order to get a parallel with what has been done in the preceding one we obtain the following scheme of functional values applied to articulatory units:

functional passivity	functional activity (morpheme)	word	word-group
(certain phonemes?)	phonemes	syllables	dissyllables

The above is the general typological characterization of archaic Chinese made on the basis of functional criteria, the same as those used for the characterization of modern Chinese in § 2.

§ 4. On considering what has been exemplified and stated in §§ 2 and 3 and particularly on comparing the typological schemes given at the end of each paragraph, the characterization of the main line of the evolution the Chinese language

has gone through seems to be a matter of course and may be summed up briefly in the following terms:

The typological evolution of Chinese from its archaic stage (the first millennium B. C., as recently reconstructed by Karlgren) up to its modern stage has been advancing along the road of and resulted in the functional devaluation of the whole system of linguistic (articulatory) units of that language, viz.:

1. the phoneme occupying in the archaic language the position of subunit functionally active (morpheme) has fallen to the lower position of unit functionally passive and ceded its place in the functional scheme to the syllable;

2. the syllable occupying in the archaic epoch of the language the position of syntactical subunit (word) has fallen to the lower position of morphological unit functionally active, formerly occupied by the phoneme, and its former place in the functional scheme has been filled up in the modern language by dissyllabic complex;

3. the dissyllabic complex corresponding in the archaic language to the simplest syntactical word group has devaluated into modern Chinese word (simple syntactical subunit), and its former place in the functional scheme has been filled up by polysyllabic complex⁵⁴).

The first two points of the above characterization have found, I daresay, sufficient empirical exemplification in what has been adduced in §§ 2 and 3; difficulties implied by certain phenomena seeming to invalidate the above statements will be talked over *infra*, § 5. What I want to do here is to give a few examples illustrating the third point, i. e., that ascertaining the morphologization of archaic syntactical word groups into modern words; the examples, with one exception, will be drawn from the *Shi King*.

⁵⁴) Cf. Ivanov and Polivanov, *Grammatika*: "Старые единицы не уцелели как единицы, а выросли новые единицы-слова, составившиеся из нескольких единиц-слов старого строя" (p. 15); and further: "... старая морфология отмерла, и выросла... новая морфология на принципе сочетания ставших неделимыми слов древнего языка" (p. 21).

In the third stanza of the second ode *Ko t'an* [86] we find the following passage: *kuei ning fu mu* [87]; Couvreur⁵⁵, p. 7, renders it very adequately: 'Revertar salutatura patrem et matrem', as *fu* [88] (archaic pron. according to KGS, p. 153, char. 102 a-e: **b'iwo*) was the archaic monosyllabic word for 'father', and *mu* [89] (arch. pron. KGS, p. 375, char. 947 a-e: **mæg*) the archaic monosyllabic word for 'mother'. The two monosyllables juxtaposed, consequently, formed a syntactical word group (quantitatively dissyllabic) 'father (and) mother', the conjunction being omitted. Now, both *fu* (< **b'iwo*) and *mu* (< **mæg*) have long devaluated into mere morphemes and cannot be used alone in modern spoken Chinese. In order to say 'father' or 'mother', as it is known, one has to add to *fu* or *mu* another morpheme, a suffix-like one, *ts'in* [90] (arch. pron. KGS, p. 222, char. 382 o-p: **ts'ien*) being, in its turn, a devaluated archaic word for (*inter alia*) 'family relative': *fu-ts'in* [76], *mu-ts'in* [91]⁵⁶. To this functional devaluation of *fu* (< **b'iwo*) and *mu* (< **mæg*), i. e., their transition from independent archaic words into dependent morphemes corresponds the morphologization of the whole archaic word group **b'iwo mæg* [92] into one compound word *fu-mu* conserved in the living speech up to this day as a common expression for 'parents': **b'iwo mæg* 'father (and) mother' > *fu-mu* 'parents'; the corresponding modern Chinese word-group 'father and mother' will be, of course, *fu-ts'in ho mu-ts'in* [93].

⁵⁵) With one exception all the translations of the *Shi King* passages quoted have been drawn from the Latin version in Couvreur's *Chou King* which seemed to suit best my purpose; references are made to the 2nd ed., Sienhien 1926. Corresponding page-references to other standard editions and translations, if needed, can easily be found by means of P. van der Loon's *Index to the Shih Ching*, Leiden 1943. This latter, however, does not comprise Karlgren's translation subsequently published in Bull. Mus. Far East. Ant., Nos. 16 (1944) and 17 (1945).

⁵⁶) Thus what is now one semantically and syntactically simple word meaning 'father' resp. 'mother' would have been in the archaic language (if it had been attested in the old texts) syntactical group of two words meaning something like 'fatherly (motherly) relative'. Let it be noted that the meaning 'relative' for *ts'in* [90] does not appear in the *Shi King* itself, but in later texts belonging into the 1st millennium B. C.

Then, the suffix-like *ts'in* [90] of *fu-ts'in* [76] and *mu-ts'in* [91] deserves, in its turn, our attention. I have said that it is a 'devaluated' (i. e. reduced to mere morpheme unable to stand alone in modern spoken Chinese) archaic word for '(family) relative'; hence there arises the question of the modern Chinese word for 'relative(s), relations(s)'. To answer this we have to go to another old text, later than the *Shi King*, but still belonging into the 1st millennium B. C., viz. the *Meng ts'i* [94]. In *Meng ts'i*, Book II, Part II, Chapter 1, we find the phrase *ts'in ts'i pan ch'i* [95] rendered by Couvreur (*Les quatre livres* Ho-kien-fou 1895; p. 382) as 'consanguinei et affines deficient ab eo'. Indeed, [96] *ts'i* (archaic **ts'io̯k*, see KGS, p. 397, char. 1031 f) was an archaic word nearly synonymous to *ts'in* [90]; the whole group **ts'ien ts'io̯k* [97], consequently, must have meant something like 'consanguinei et affines' as Couvreur renders it. Now, it is this archaic syntactical word-group which following the functional devaluation of its constitutive elements from words into morphemes devaluated, in its turn, into one dissyllabic modern Chinese word meaning 'relative(s)': **ts'ien ts'io̯k*, Couvreur's 'consanguinei et affines' > *ts'in-ts'i* 'relative(s)'; neither *ts'in* [90] nor *ts'i* [96] are able to stand alone in modern spoken Chinese⁵⁷).

Let us return to the *Shi King*. In the second stanza of the ode *King ch'i* [98] we find two further instances of the kind. The first is the group consisting of two synonymical (or nearly synonymical) words juxtaposed: *kuang ming* [99], rightly rendered by Couvreur, p. 438, as 'claritas splendens' as [100] *kuang* (< **kwang*, cf. KGS, p. 306, char. 706 a-e) means 'light, brilliant', and [101] *ming* (< **mjang*, KGS, p. 323, char. 760 a-d) 'brightness' in the *Shi King* language⁵⁸). Now, this archaic syntactical

⁵⁷) Cf. in this connection what Carr says in *Polysyllabicity*, pp. 70—71.

⁵⁸) The monosyllable *kuang* [100], parallelly to its use as a morpheme, has been conserved as an independent monosyllabic word up to this day; *ming* [101], on the contrary, has been reduced to mere morpheme and cannot be used as a syntactical unit in modern Chinese. In Chao and Yang, *Concise Dict. of Spoken Chin.*, p. 105, the latter monosyllable is marked as 'bound',

word-group **kwāng miǎng* [99] has become one compound word *kuang-ming* with the meaning of 'brightness'; in this connection I think it best to give the word to a Chinaman: "... le mot *kuang-ming* signifie la clarté dans la langue parlée. Le sens propre du premier caractère est *lumière* (*kuang*) et le deuxième seul (*ming*) représente le mot *clarté* dans le *wen-yen*. Lorsque les deux se composent en un mot, le premier perd complètement son sens propre. Quand on entend ces deux syllabes: *kuang-ming* on ne pense pas au sens de *lumière*, mais seulement à celui de *clarté*" (Tchen Ting-ming, *Etude phonétique*, p. 24)⁵⁹).

The same stanza finishes with the following line: *shī wo hien tē hing* [102] which according to Karlgren "does not mean, with Legge: 'Show me how to display a virtuous conduct' but, with Cheng: 'It (Heaven) shows me the bright path of virtue'"⁶⁰). Here we find again the dissyllabic syntactical word-group *tē hing* [103], in arch. pron. **tək g'ǎng* (See KGS, p. 368, char. 919 k-l, and p. 321, char. 748 a-d); *tē* (< **tək*) [104] was the arch. word for 'virtue, virtuous', and *hing* (< **g'ǎng*) [105] meant 'to go, walk; road, path' in the *Shī King* language. Now, the two monosyllables have long been deprived of their quality of independent words they had in the archaic language and reduced to mere morphemes in modern Chinese⁶¹); the arch. word-group **tək g'ǎng* [103], in its turn, has been morpho-

i. e. always "spoken in close juncture" with another monosyllable, as the authors explain the term 'bound', p. xxvii.

⁵⁹) It seems to me, however, that *kuang-ming* [99] is generally understood and used as a synonym of *kuang* [100] alone. Tchen's opinion is important in so far as he ascertains the transition of an archaic word group into one word, semantically indecomposable in the mind of hearer and speaker—irrespective of any nuance of meaning.

⁶⁰) See *Glosses on the Ta Ya and Sung Odes*, Bull. Mus. Far East. Ant. No. 18 (1946), p. 161; cf. also *The Book of Odes Ta Ya and Sung*, *ibid.*, No. 17 (1945), p. 92. — Couvreur, p. 438, renders the passage rather freely: "docete me praeclare bonas actiones (faciendas)".

⁶¹) The latter in its principal sense only; it can be used in modern Chinese as an independent word meaning 'will do, be all right' as in [106] *t'a hing ma? hing* (drawn from Chao and Yang, *Con. Dict. Spoken Chin.*, p. 193).

logized into one modern Chinese word syntactically indecomposable meaning 'virtue': **tək g'ǎng* 'virtuous conduct (Legge); path of virtue (Karlgren)' > *tê-hing* 'virtue'⁶²).

Two striking examples are to be found in the first stanza of the ode *Tung fang wei ming* [108] where we read the following passage: *tien tao i shang* [109]; Couvreur, p. 106: 'inverto, perverto superiorem vestem et inferiorem vestem'. Couvreur's translation renders adequately the sense of all the four monosyllabic arch. Chinese words: [110] **tien* (= mod. Pek. *tien*; cf. KGS, p. 220, char. 375 m) '(top of the head, to fall on the head, hence:) overthrow, turn over'; [111] **tog* > *tao* (KGS, p. 423, char. 1132 c) 'turn over, invert'; [112] **ier* > *i* (KGS, p. 264, char. 550 a-e) 'upper garment'; [113] **diang* > *shang* (KGS, p. 312, char. 725 d) 'lower garment'. Now, the arch. word-group **tien tog* [114] has become modern Chinese compound word *tien-tao* [114] 'to turn over, invert', and the group **ier diang* [115] 'upper and lower garments' has given *i-shang* [115] which is the common modern Chinese word for 'clothes (in general)'; the whole *Shi King* passage adduced sounds quite modern: *tien-tao i-shang* [109] 'to turn one's clothes upside down', cf. Karlgren's rendering of this passage in *The Book of Odes Kuo Feng and Siao Ya*, Bull. Mus. Far East. Ant. No. 16, 1944, p. 202. With regard to the group **ier diang* [115] let it be noted that in the following stanza of the same ode we find the two words [112] **ier* (> *i*) and [113] **diang* (> *shang*) grouped in the reversed order: **tien tog diang ier* [116], manifestly in order to make the whole passage rime with the preceding line. As both **ier* [112] and **diang* [113] were independent words in the *Shi King* epoch, it must have been just as good to say **diang ier* as **ier diang*, the same as one can say in English 'lower and upper garments' or 'upper and lower garments' at will; now, it is only the latter group which

⁶²) As Mrs. Lin Li-wei, Ecole des Langues Orientales Vivantes in Paris, kindly informs me the word *tê-hing* [103] sounds 'literary', and its semantic equivalent *tao-tê* [107] is more current in the modern spoken language. The former, however, happens to be met with in conversational style and is perfectly intelligible.

has been morphologized into modern Chinese word *i-shang* [115], and it is not possible to say *shang-i* [117] in the modern colloquial language; *i* [112] and *shang* [113] standing alone are equally impossible — they are no more words but mere constitutive elements of words, morphologically indecomposable, i. e. morphemes.

In connection with the examples adduced above one general remark is to be made. It must be borne in mind that while speaking above, p. 400, of the functional devaluation of archaic syntactical word-groups, i. e., their morphologization into modern Chinese compound (or quasi-compound) words of some kind or other I never meant that every one of the word-groups actually attested in the old texts had to become a modern Chinese word; such an assumption would be not only contrary to the truth but a pure nonsense, as well. It is a matter of course that many archaic word-groups as found in the old texts have perished in the living speech and never been morphologized; on the other hand, many dissyllabic words have made their appearance in the modern language which have never been (and could not be) attested in the archaic epoch. The general principle as formulated by me above, p. 400 point 3, means only that: 1. the origin of certain dissyllabic compound (quasi-compound) words commonly used in modern spoken Chinese can be traced back as far as the *Shi King* epoch in which they were but syntactical groups consisting of two monosyllabic words juxtaposed, and 2. modern Chinese dissyllabic words not attested as syntactical word-groups in the archaic language (or, strictly speaking, in the archaic texts conserved up to this day) should, on principle, be looked upon as such if considered from the point of view of the archaic stage⁶³. The latter point is actually implied by the principle of monosyllabicity of words and dissyllabicity of word-groups in archaic Chinese and that of monosyllabicity of morphemes and dissyllabicity of words in the modern language; the former one has been sufficiently proved by means of instances quoted above

⁶³) This, of course, does not apply to phonetic loans, ancient and modern, from foreign languages, as e. g. recent 'neologisms' *mo-teng* [118] 'modern', *in-tê* [119] 'index', etc.

drawn mostly from the *Shi King*, and it goes without saying that further examples of this kind are to be found in old texts. I shall have to return to this subject *infra*, § 5, where a few examples more (of synonymical groups) will be given.

Finally, let one example more be adduced, this time one drawn from medieval Chinese. H. Maspero in his paper *Sur quelques textes anciens de chinois parlé* writes in connection with the monosyllable [120] *er* in the 9th century language: "Peut-être même le mot *eul* [120]... était-il déjà employé comme simple suffixe, si l'expression *miao-eul* [121] que je relève... signifie comme je crois »un chat« et non »un petit chat«" (*loc. c.*, p. 12 footnote (1)). Indeed, Maspero's hesitation whether *miao-eul* (in Pek. pron. *mao-er*) [121] is to be rendered by 'a little cat' or 'a cat' *tout court* is that whether the expression in question is to be considered still as a group of two monosyllabic words having each a sense of its own ('cat-child', i. e., 'little cat, kitten')—which would have been the only interpretation possible from the point of view of archaic Chinese—or already as one word consisting of the lexical root-morpheme *mao-* [122] and the suffixal morpheme *-er* [120] (< **ńzię* < **ńięg* 'child, son'; see KGS, p. 356, char. 873 a-d) deprived of the primary sense it possessed as an independent archaic Chinese word and reduced to a mere word-formative suffix.

The problem of transition of certain archaic syntactical word-groups into modern compound (or: quasi-compound, cf. *supra*, p. 387, footnote 32) words, other words being modelled after this pattern, although it has not been dealt with, as far as I am aware, in sinological literature, seems to deserve special attention of the linguist interested in the general history of the Chinese language and it is the reason for which I thought it necessary to discuss it here as far as it has been allowed by considerations of space.

It is exactly this phenomenon which points clearly to the fact that morphology in the modern Chinese language has been born on the ground of archaic syntax, and consequently, furnishes us with an explanation as to the specifically compositive character of modern Chinese words, the curious reciprocal interpenetration of morphology and syntax in the modern col-

loquial language and the identity of rules governing the morphological grouping of morphemes into words as well as the syntactical grouping of words into phrases⁶⁴). It would be, however, inadmissible—in my opinion—to conclude from this the identity of these two domains of modern Chinese grammar or reduce the former to the latter as it has often been done by many; even if there occur facts extremely difficult to be qualified, as to whether morphological or syntactical, in most cases the strict delimitation of morphology and syntax can be made.

On the other hand, the phenomenon discussed seems important, too, from the point of view of general linguistics where the question of the genesis of compound words is largely discussed and theories are propounded deriving the *composita* from the corresponding ancient syntactical word-groups⁶⁵); it is evident that the empirical material offered by Chinese furnishes the linguist with an important contribution to the discussion of this problem.

§ 5. After the perusal of the preceding paragraphs the careful reader is sure to raise objections, both material and formal, to what has been written. He will be able to adduce facts essential and specific which did not find due consideration in the present paper (e. g. the problem of tones, so typical of Chinese, or that of word-stress in the modern spoken language⁶⁶), or even facts which to a certain extent seem to invalidate my statements.

⁶⁴) In this connection the reader is referred once more to P. Demiéville's remark quoted above, p. 391, footnote 40.

⁶⁵) For information on this subject as well as for invaluable remarks and hints concerning the problem of syntactical word-groups and compound words as discussed in general linguistics I am particularly indebted to Dr. Z. Rysiewicz.

⁶⁶) Let it be said here that the functional evolution of tone and stress in Chinese fits the general evolutionary frame as sketched above in § 4. Roughly speaking, musical accent or tone which was functionally active in the archaic language and participated along with the phonemes in functional alternations has been equally reduced to mere passive factor in the modern

In this connection one will adduce, on the one hand, the existence of traces of archaic morphology in modern spoken Chinese, viz. a few cases of functional interchange of phonemes (and tones) inside words evidently cognate (e. g. [125] *ch'ang*² 'long': [126] *chang*³ 'to grow; senior'), the phenomenon (practised in modern Pekinese on a considerable scale) of contracting the suffixal morpheme *-er* [120] and the preceding root-syllable into one monosyllabic complex (e. g. [127] *feng-er* > *fer* 'breeze', [128] *wan-er* > *war* 'to play', etc.) which in some cases is accompanied by a slight change of timbre of the vowel in the root-syllable⁶⁷, and even the phenomenon referred to above, p. 389, footnote 35, viz. that of sonorizing unaspirated plosives and affricates inside dissyllabic and polysyllabic words. All these phenomena, different in origin and chronology as they are, seem to speak against my statement about modern Chinese not having phonemes functionally active; the last two are even of special interest as they are perhaps forerunners of the future development of Chinese and mark something like a cyclical process: functional activity of phonemes in the archaic period (traces of which have persisted in cases as [125] *ch'ang*²: [126] *chang*³, etc.) — loss of this activity — return to it. What is more, the phenomenon of contracting the suffix *-er* [120] and the preceding root-syllable into one monosyllable points to a certain trend towards re-monosyllabization of dissyllabic complexes existing in modern Chinese and this trend finds a clear corroboration in other common con-

language; on the other hand, stress must have existed in the monosyllabic archaic language only as syntactical sentence-stress and thus, in its turn, has been reduced in the modern language from a syntactical factor into a morphological one, cf. in modern Chinese, e. g., [123] *yung-ljen* 'to employ people', and *yung-jen* 'servant' (in the latter case *yung* is sometimes written [124] which is but a mere graphical variant). For a general survey of tone and stress in Chinese see, e. g., Karlgren, *A Mandarin Phonetic Reader*, Archives d'Etudes Orientales, vol. 13, Stockholm 1918, pp. 19—61; and Carr, *Characterization*, pp. 60—66. — The above, however, does not apply to Cantonese in which stress is functionally indifferent, cf. Chao, *Cantonese Primer*, p. 36.

⁶⁷) Cf. D. Carr, *Characterization*, p. 59.

tractions of dissyllabic expressions into monosyllabic ones⁶⁸), as e. g. [129] *liang-ko* 'two' > [130] *lia*⁶⁹; [131] *pu-yao* 'must not, do not' > [132] *pie*; [133] *pu-yung* 'need not' > [134] *peng*⁷⁰; [135] *shem* (< *shen*)-*ma* 'what?' > [136] *sha* (this latter non-Pekinese); etc. It is evident that the above examples constitute a close parallel to the preceding ones of rudiments of alternation of phonemes in modern Chinese, and thus the cyclical process alluded to gets a considerable amplification: it embraces not only the trend towards re-activization of phonemes having become passive but also that towards re-monosyllabization of certain dissyllabic words. — On the other hand, instances can be given of dissyllables morphologically and semasiologically indecomposable (e. g. [137] *lo-po* 'radish'; [138] *mei-kuei* 'rose'; [139] *po-li* 'glass'; etc.) which, in their turn, seem to invalidate the principle of functional activity of syllables in modern Chinese as well as that of monosyllabicity of words in the archaic language.

All the facts adduced would deserve special discussion which cannot be started in this place and must be confined to a few general remarks. Let it be sufficient to say that aware of all these facts as I am, I am none the less far from exaggerating their typological importance and do not think them to invalidate seriously either the characterization of the archaic stage or the modern one as given above in §§ 2 and 3, or my characterization of the typological evolution of Chinese as given in § 4. Indeed, with regard to cases of the kind [125] *ch'ang*² 'long': [126] *chang*³ 'to grow, senior'⁷¹) which apparently shake

⁶⁸) The phenomenon of "Verschmelzung zweier Wörter, die zusammen ein Compositum bildeten" into one monosyllable was already known to W. Grube, see his *Die sprachgeschichtliche Stellung des Chinesischen*, Leipzig 1881, p. 17.

⁶⁹) This has been demonstrated by Chao Yüan-jen in his paper *A Note on lia*³, *sa*¹, etc. in *Harvard Journal of Asiatic Studies* I (Cambridge, Mass. 1936), pp. 33—38.

⁷⁰) This example is particularly striking as there is a perfect parallel between the phonetical contraction and the graphical one: to *pu-yung* > *peng* corresponds [133] > [134].

⁷¹) Let it be noted that [126] *chang*³, to my knowledge, never stands alone in Pekinese, and appears only in dissyllabic

my statement about modern Chinese not having phonemes functionally active, it must be emphasized that they are but dead remainders of an early morphological epoch, conserved in the living speech up to this day by a curious chance in spite of the great sound-nivellation and in spite of the language having developed entirely different means of derivation and word-formation. As a matter of fact such residual alternations are limited to certain individual words (or morphemes), cannot be applied in other cases, and therefore from the point of view of the modern language they are to be considered as mere facts of vocabulary, not of morphology ⁷²).

On the other hand cases as [137] *lo-po*, [139] *po-li* and the like are most probably either phonetic loans from other languages or archaic compounds (groups) having become inanalysable in both speech and writing ⁷³), and thus their importance seems

compound words as [140] *sheng-chang* 'to grow', [141] *kia-chang* 'family head', etc. In itself it is, then, a morpheme, not an independent word. The residual alternation *č* (written *ch*) : *č'* (*ch'*) is not a primary one but a reflex of the archaic alternation *t* : *d'* (see KGS, pp. 310—311, char. 721 a-e).

⁷²) In this connection I only have to refer the reader once more to Ivanov's and Polivanov's *Grammatika*: "... (such alternations) отнюдь не носят характера „живых чередований“ — способных быть переносимыми на новые слова..." (pp. 19—20), and further: "... (the phenomenon in question) является просто словарным фактом — случайного (для современного языкового мышления) сходства двух близких по смыслу лексических морфем" (p. 20).

⁷³) Cf. Karlgren, *A Mandarin Phonetic Reader*, p. 38: "Words consisting of more than one syllable and yet incapable of being divided into component parts with semological values have always existed in »monosyllabic« Chinese and they still exist, though in a rather limited number". *Ibid.* he distinguishes, besides onomatopoetic words (cf. *supra* p. 398) and modern (phonetic) loan-words, "a number of dissyllabic words of uncertain etymology, perhaps originally loan-words or compounds" (expatiated by me). Two striking instances of dissyllabic words now morphologically indecomposable if written in their usual form (with 'radical' 96) and yet perfectly analysable when written as they originally were: [142] *hu-p'o* 'amber' < [143] *hu-p'o* 'tiger's soul', and [144] *ma-nao* 'agate' < [145] *ma-*

to be considerably diminished. As to the modern contractions and alternation-like processes inside certain root-syllables (e. g. [128] *wan-er* > *war* 'to play', as against [146] *wan-i-er* > *wan-ir* 'plaything, toy', the alternation in the root-syllable [147] *wan* being *n* : *r*) they are, after all, exceptional phenomena (or better: epiphenomena), more important from the descriptive point of view than from the typological one, and by far cannot be considered as a normal morphological device at the present stage of the Chinese language. Those to whom the above explanations may seem unsatisfactory may be reminded that linguistic reality—just like that of any other domain of the humanities—is far too rich and complicated to be shut up in our schemes; establishing such schemes we necessarily have to operate with approximations and the most important is to make the nearest—

nao 'horse's brain', were given by P. Pelliot in his *Brèves remarques sur le phonétisme dans l'écriture chinoise*, T'oung Pao XXXII, 1936, p. 165. On attempts to explain [137] *lo-po* etc. as early phonetic loans cf. H. Frei, *Monosyllabisme et polysyllabisme*, p. 149, n. 7. — P. A. Boodberg in his paper *Some Proleptical Remarks on the Evolution of Archaic Chinese*, Harvard Journal of Asiatic Studies II, Cambridge Mass. 1937, pp. 329—372 (see also his 'Ideography' or Iconolatry? in T'oung Pao XXXV, 4, 1940, pp. 266—288) has developed a theory deriving the whole of what he calls 'alliterative binoms' from a hypothetical dimidiation of initial 'consonantal clusters' of most various kinds. The problem itself is not new and had already been started by Lin Yü-t'ang [81] in his paper *The Development of the Chinese Language* (The Chinese Social and Political Science Review IX, 3, Peking 1925, pp. 488 - 501), although on a much more reasonable scale and with the direction of reasoning exactly reversed to that adopted by Boodberg. Lin Yü-t'ang who succeeded in finding out "over a dozen dialectic words recorded in old books which clearly point to the existence of such sounds, as *blang*, *tluan*, etc." (p. 496) infers the existence of initial consonant groups from the 'binoms', while Boodberg does exactly the reverse, and this on an extensive scale. On the whole Boodberg's theory seems too far-fetched, cf. P. Seruys's criticisms in *Philologie et Linguistique*. In any case Boodberg's theory does not apply to dissyllables analysable as earlier word-groups which are certainly much more typical of Chinese than 'binoms'.

though approximate—approach to the truth. Last not least let it be noted that in the present paper it has by no means been my intention to exhaust the problem. My purpose has only been that of pointing out the general frame inside which, I daresay, the evolution of the Chinese language took place; therefore, in order to avoid losing sight of this general frame as well as owing to lack of space I deliberately had to leave out of consideration many a question of detail. The latter answer can also be given to those objecting that I have been operating with linguistic notions, as 'morpheme', 'word', 'word family', etc., the sense and extension of which has not yet been firmly established for Chinese, modern Chinese in particular⁷⁴). To this latter problem, specially interesting not only from the point of view of sinology but also from that of general linguistics, I hope to revert in another place.

There remains still one formal objection which I should like to try and meet here as it tends towards subverting the very method adopted in working up the present paper. It may be formulated as follows: the evolution of a language is a continuous process and its line is not determined solely by the two terminal points (initial and final) the intermediary stages remaining disregarded, hence a characterization of the typological evolution of Chinese based solely upon a comparison of the two terminal points of the evolutionary line, which has been done, is methodologically inadmissible⁷⁵).

First of all it must be emphasized that the two typological stages of the Chinese language, archaic and modern, dealt with in the preceding paragraphs, are by no means mere time-points but precisely stages extending over many centuries each,

⁷⁴) It has been underlined by Ivanov and Polivanov in their *Grammatika* that there is no exact correspondence between the linguistic notions grown up on the ground of Indoeuropean linguistics and the Chinese linguistic subunits: "Строго говоря, точного соответствия нашим единицам языкового мышления... в современном китайском языке не существует" (p. 3). Cf. also D. Carr, *Characterization*, p. 66.

⁷⁵) The above objection was raised by Prof. W. Jabłoński in the discussion on my lecture.

although it is necessarily not possible to determine exactly their duration not only because of lacunes in documentary material available but for lack of any strict line of demarcation, the evolution being *ex definitione* a gradually advancing process. In any case the archaic stage—considered from the typological point of view—may approximately be identified with the period the lower limit of which is lost somewhere in the dawn of Chinese history and the upper limit of which roughly coincides with the epoch when the written (or literary) language ceased to be typologically equivalent to the spoken one. Such an identification seems to be quite admissible in view of the fact that the divergence between the written language and the living colloquial idiom arose as a direct consequence of the typological transformation of the latter while the former, more conservative, kept to old principles; the most striking feature of the new type has been, as it is known, polysyllabicity of words as against their monosyllabicity in the archaic stage. According to Karlgren the written language ceased to be the reproduction of the spoken one not earlier than in the Han period⁷⁶), let us say, then, about the beginning of our era; on the other hand, towards the end of the 1st millennium of our era we face a 'vulgar' kind of literature, looked upon with contempt by the Chinese literati, written in the spoken language of the epoch, closely resembling modern colloquial

⁷⁶) Cf. Karlgren, *The Authenticity of Ancient Chinese Texts*, Bull. Mus. Far East. Ant. No. 1 (1929): "I go so far as to say that I believe even in the Han period the written language was not very far removed from the colloquial" (p. 178); *ibid.*, p. 177, Karlgren refutes Forke's opinion about China never having a literary language directly based upon the colloquial. H. Maspero in his review of Karlgren's paper quoted (see *Journal Asiatique* CCXXII, fasc. annexe janvier—juin 1933, pp. 38—48) agrees with Karlgren in this point: "En fait, les écrivains des Han écrivent la langue de leur temps... et cette langue, c'est celle de la cour... devenue vite une sorte de *κοινή* littéraire... Ils n'écrivent pas une langue factice extraite de la littérature ancienne" (p. 47). There are, however, scholars who do not judge the question to have been solved, cf. P. Serruys, *Philologie et Linguistique*, pp. 179—181, and P. Demiéville, *loc. c.*, p. 138.

Chinese⁷⁷⁾ — which allows us to place the beginnings of the modern stage somewhere about that date. The above statement implies, however, that there is a gap of about one thousand years or so from which documentary material in spoken Chinese is lacking. It must have been precisely the period during which the living language was definitively abandoning its old typological frame and forming and establishing the new one. There is no hint whatever which might make us suppose that the transition from the archaic type to the modern one, so different from one another as it has been shown in the preceding, had been going along — speaking figuratively — an irregular or a broken line with sudden deviations or turnings. On the contrary, everything — and in the first place the very perfect regularity in the shifting of the whole system of Chinese linguistic units and factors (including tones and stress) as above stated — seems to speak in favour of the supposition that the transition in question was gradually performed along — again speaking figuratively — a regular line of evolution, i. e., that, in other words, the intermediary stages are to be placed on the line strictly determined by its terminal points. In this connection the reader will notice that the linguistic material offered by the 9th century Buddhist texts, written in the spoken language of the epoch, worked up by Maspero and frequently referred to in this paper may to some extent be considered as representing such an intermediary stage in which polysyllabism of words was not yet so strongly accentuated as it has become in our own days⁷⁸⁾;

⁷⁷⁾ See Karlgren, *Sound and Symbol in Chinese*, pp. 36—37. The texts analysed by Maspero in *Sur quelques textes anciens de chinois parlé* belong to this epoch.

⁷⁸⁾ Cf., e. g., Maspero's remark regarding the 9th century verbs: "A côté des verbes simples, les verbes composés par l'accolement de deux caractères sont fréquents, mais moins cependant qu'aujourd'hui" (*Sur quelques textes anciens*, p. 18); analogous statement with regard to nouns *ibid.*, p. 11, after which he continues: "Mais ces composés n'offrent rien d'assez spécial pour qu'il vaille la peine d'insister" — a remark which one can hardly accept in view of the importance of the problem. Maspero's paper was inaccessible to me in the preparation of my lecture.

there is, too, some material belonging to earlier stages, although rather scanty and not yet sufficiently worked up⁷⁹).

The *causa efficiens* of the typological evolution was, as it is known, the simplification and nivellation of the phonetic structure of archaic monosyllabic words leading to total homophonization of lots of monosyllables originally differing in sound⁸⁰). The direct consequence of this sound-simplification was twofold: 1. it made old monosyllabic words extremely ambiguous and hence perfectly unintelligible when orally used which was of prime (and detrimental!) importance in everyday practice and badly needed a preventive device to save the communicative function of the spoken language, and 2. owing to the nivellation and dropping of phonemes marking the functional alternations in related monosyllables it must have led to a loss of feeling of the etymological bond between words genetically cognate and, consequently, as we could express it in functional terminology, to a loss of feeling of elementary phonemes being functionally active. In these circumstances dissyllabization of words by means of replacing old monosyllables by compound words either strictly corresponding to archaic syntactical word-groups or formed and modelled after the pattern of such groups which the genius of the Chinese language had chosen as a preventive device against progressive homophonization and unintelligibility of monosyllables, has become the universal and only word-formative method, the syllable becoming the elementary (morphologically) structural subunit. In other words sound-simplification and its direct practical consequence: homophonization jointly caused both functional degradation of Chinese monosyllables from elementary syntactical subunits (words) to morphological ones (morphemes) and functional degradation of Chinese phonemes from subunits functionally active (morphemes) to passive ones.

It is clear from the above that polysyllabization (dissyllabization) of the Chinese vocabulary must have been parallel to the gradual sound-nivellation, and we should expect that the more simplified in their phonetical structure became the monosyllables,

⁷⁹) Cf. *infra*, p. 419 ff.

the more 'dissyllabic' was becoming the language⁸¹). There must have been, too, — according to Karlgren's reconstructions — homophonous monosyllables even in the archaic epoch, though of course not nearly so numerous as in the modern language⁸²); it is sufficient to glance over the pages of *Grammata Serica* to find out such cases, although there must have been tone distinctions, impossible to be reconstructed for the archaic period, which made the number of homophones smaller than it would appear at the first glance⁸³). It goes without saying that those 'primary homophones', as Karlgren calls them, must have encouraged the creation of special dissyllabic groups to avoid ambiguity already at the archaic stage. In this respect synonymical (i. e. consisting of synonymical monosyllables) groups seem particularly relevant as in such cases, implying no modification of sense whatever (though there may have been primarily some kind of emphasis) there can be no question of anything else but of making the whole group more distinguishable and intelligible to the ear of the hearer than each one of the constituents was when standing alone. It stands to reason that such and similar groups must have come into existence, acquired their citizenship in the living language and been transformed into compound words but gradually, and it seems certain

⁸⁰) For a general and popular exposition of this see Karlgren, *Sound and Symbol*, Chapter III.

⁸¹) Tchen Ting-ming assures: "... plus l'époque d'un texte est proche de nous, plus nous y trouvons de mots représentés par deux caractères" (*Etude phonétique*, p. 22), and Maspero's statements with regard to the language of the 9th century are much alike (cf. *supra*, p. 414, footnote 78). As far as I know, however, the problem of the gradual dissyllabization of Chinese vocabulary has not been systematically studied up to this day and needs further investigation on a more extensive scale, cf. *infra*, p. 419.

⁸²) Assertions as that found in P. A. Boodberg, *Some Proleptical Remarks*, p. 360, assuming that "the number of homophones in the archaic period of the language... was probably greater and the number of individual syllabic phonemes even more limited than in modern Mandarin" (!?) are mere assumptions devoid of any positive premises.

⁸³) Cf. KGS, p. 15.

a priori that at first they must have been used facultatively and parallelly with their simple constituents standing alone.

Indeed, as we have seen above (cf. *supra*, p. 404), synonymical groups can be traced back as early as the *Shi King* period, and they appear, too, in other texts belonging into the 1st millennium B. C. In *Meng tsi* [94] which is generally accepted, even by the most severe critics, as genuine⁸⁴), besides word-groups of other types, as, e. g., [17] **g'ôk mîwên* (KGS, p. 399, char. 1038 a-c and p. 236, char. 441 g-h) 'studying and asking' morphologized in modern Chinese into compound word *hüe-wên* 'learning, erudition' (cf. *supra*, p. 384, series 1), I have found five dissyllabic groups consisting of synonymical (or nearly synonymical) monosyllables which have become words commonly used in modern spoken Chinese. These five are: [97] **ts'ien ts'ioh* > *ts'in-ts'* 'relative(s)' (already adduced *supra*, p. 402); [148] **b'ang giüg* > *p'eng-yu* 'friend(s)' (p. 361, char. 886 a-e and p. 389 char. 995 e-h⁸⁵); [149] **iar b'üük* > *i-fu* 'clothes'⁸⁶) (p. 264 char. 550 a-e and p. 372, char. 934 d-f); [150] **dz'i kji* > *tsi-ki* 'oneself' (p. 450, char. 1237 m-p and p. 377, char. 953 a-e⁸⁷); and [152] **ngan siäk* 'countenance, looks' > *yen-sê* 'colour' (p. 181, char. 199 c and p. 370, char. 927 a⁸⁸). Two of them, viz. [148] **b'ang giüg* and [149] **iar b'üük* occur equally in the *Shi King*.

⁸⁴) Karlgren calls it "a well known authentic work" (*The Authenticity of Ancient Chinese Texts*, Bull. Mus. Far East. Ant., No. 1, p. 169), and states that its language "represents a somewhat younger stage of the (Lu) dialect", see his *On the Authenticity and Nature of the Tso chuan*, Göteborgs Högskolas Årsskrift XXXII, Göteborg 1926, p. 35.

⁸⁵) Numbers in parenthesis refer to pages and characters in KGS.

⁸⁶) [149] *i-fu* is used synonymically with [115] *i-shang*, adduced *supra*, p. 404.

⁸⁷) As it has not been possible to reconstruct the archaic reading of [151] *tsi*, I give the whole group in its ancient (6th century) pronunciation.

⁸⁸) The latter example is not so clear as the preceding ones as there is some shifting in the meaning of both constitutive elements and the whole group: [153] *yen* (< **ngan*) originally meant 'face' and [154] *sê* (< **siäk*) 'countenance'. — In the above enumeration I have deliberately excluded the synony-

Along with these synonymical groups—which must have been distinctly felt as such at that time—their monosyllabic constituents must have been used alone with the meaning of their own as one may judge from the fact that in *Shi King* and *Meng tsī* as well as in other old Chinese texts [157] *yu*, [158] *ki*, [112] *i*⁸⁹), [160] *fu*, etc. standing alone occur parallelly with the groups adduced which has long become impossible in the spoken language.

Now, if we assume, as Karlgren does⁹⁰), that the dialogues of Mencius are the purest possible reproduction of the spoken language of the time, the examples adduced are sufficient to prove that at the time when the *Meng tsī* was being written down, and even much earlier in the very *Shi King* epoch, both monosyllabic words and dissyllabic word-groups as semantic equivalents of the former were parallelly used (co-existed) in the living speech, the former being still the statistically predominant norm, and the latter being the forerunners of the new typological era.

With the gradually and steadily increasing number of homophones⁹¹) the number of synonymical groups must have been increasing, too. What is more, the monosyllabic constitutive elements of the latter which at earlier stages, as we have seen,

mical group [155] **ngiǎn ngio* > *yen-yü* (KGS, p. 191, char. 251 a-d and p. 142, char. 58 t-u) 'speaking and talking' occurring in the *Meng tsī* as it is rather unusual in the modern colloquial language, the word [156] *yü-yen* (consisting of the same monosyllables grouped in the reversed order) being used instead with the meaning of 'language, speech'.

⁸⁹) It may seem striking that this monosyllable used alone is attested as late as the 9th century A. D., see Maspero, *Sur quelques textes anciens*, p. 27: [159] *pa wo chu-ti i* 'taking clothes worn by me'. Here, however, the meaning is clearly indicated by the context.

⁹⁰) See *The Authenticity of Ancient Chinese Texts*, pp. 177–178.

⁹¹) In this connection one will best consult the general exposition given by Karlgren in KGS, pp. 14–45 (From Archaic Chinese to Ancient Chinese) and pp. 45–64 (From Ancient Chinese to Mandarin); cf. particularly tables on pp. 41–44 and 64 for nivellation of finals: archaic to ancient and ancient to modern Mandarin.

were capable of being used alone, following the sound-nivellation must have lost their quality of words and become mere morphemes, the groups themselves being morphologized into dissyllabic (bi-morphemic) words⁹²). It goes without saying that an investigation of Chinese vocabulary started from this point of view would be very useful for the general history of the language. As yet little or nothing has been done in this respect⁹³), although there is some valuable material recorded enabling us to peep even into the 'gap' caused through the fact that spoken Chinese was for centuries out of use in writing, the dead 'classical' language being used instead.

In my communication held at the XXIst International Congress of Orientalists (Paris, July 1948) I pointed out the fact that glosses made by [167] Kuo P'o (276—324) in the old dictionaries [168] *Er-ya* and [169] *Fang-yen* contain a considerable number of instances of dissyllabic expressions given by the commentator as equivalents—current in the language of his

⁹²) Here I have confined myself to synonymical groups, most relevant ones, but it is self-evident that the above refers equally *mutatis mutandis* to groups of other kinds.

⁹³) This can be said in spite of the enormous work done by Chinese philologists and lexicographers, especially those of the Ts'ing period, resulting in the compilation of extensive dictionaries of phrases and dissyllabic expressions, as e. g. [161] *P'ei-wen yün-fu* (completed in 1711) and [162] *P'ien-tsi lei-pien* (printed in 1726); among recent works of this kind one will note [163] *Ts'ü-lung* by [164] Chu K'i-feng, 2 vols., published in Shanghai in 1934. Extensive and valuable as these dictionaries are, it must be borne in mind that the criteria followed by their compilers were necessarily quite different from those of the typological evolution of the language. On the other hand, investigations on individual dissyllabic expressions pursued by Chinese scholars mostly bore on indecomposable dissyllables which have no argumentative force in favour of the general theory of evolution of Chinese as sketched in the present paper. On [165] Wang Kuo-wei's repertory of dissyllabic expressions [166] *Lien-mien ts'ü-p'u* cf. Pelliot's remarks in *T'oung Pao* XXVI, 1929, p. 159. The most convenient source for the study of word-groups occurring in early Chinese literary monuments are the well-known *Indices* published by the Harvard-Yenching Institute (*Sinological Index Series*, and *Suppl.*).

epoch—of monosyllables recorded in texts glossed⁹⁴); glosses in the *Fang-yen* are particularly important due to the nature of the text being, as it is known, a repertory of dialectal words dating back as early as the beginning of the 1st century; thus the instances of dissyllabization attested by Kuo P'o can in some cases be localized not only in time but also in space, i. e., in particular ancient Chinese dialects. As I am preparing a more detailed study on Kuo P'o's glosses and their importance to the question of dissyllabization of words in ancient Chinese I will not dilate further on this here and shall confine myself to one single instance, although a rather complicated one, which besides having linguistic interest is not deprived of literary interest as well.

In the third passage of the second chapter of *Fang-yen* we find a lot of dialectal equivalents of the word [170] *mei*⁹⁵) 'beautiful', among them [171] *t'o* (*to*) which according to *Fang-yen* was used ([172] *yüe* 'it is said', as it stands in the text) "outside southern Ch'u" (*nan Ch'u ch'i wai* [173]); the monosyllable [171] *t'o* (*to*) is glossed by Kuo P'o: [174] *yen wo-t'o ye* 'it is said: *wo-t'o*'. It seems self-evident that what Kuo P'o wanted to express was that in his time the monosyllable [171] *t'o* was no longer used alone but only in combination with another synonymical monosyllable [175] *wo* 'beautiful'⁹⁶) forming thus the compound word [179] *wo-t'o* 'beautiful'. Now, the Ts'ing scholars commenting upon both *Fang-yen* and Kuo P'o's com-

⁹⁴) A résumé of this communication *Sur la dissyllabisation des mots en chinois ancien d'après les gloses de Kouo P'o dans le Eul-ya et le Fang-yen* is about to appear in the *Actes* of the Congress.

⁹⁵) In the following I give only the modern readings of monosyllables adduced. Let it be remarked that as far as obsolete and 'dictionary' characters are concerned these readings are artificially construed by means of phonetic glosses found in early commentaries and lexica.

⁹⁶) It must be noted that as far as I know there is no text support of [175] *wo* standing alone. It has not been listed in KGS; one can, however, easily reconstruct at least the ancient reading of it by means of *fan-ts'ie* [176] given by Chang Chan [177] in his commentary to *Lie ts'i*, see passage quoted: *wo in wu kuo ts'ie* [178] which gives $*uo + *kuâ = *uâ > wo$.

mentary refer to a passage in the [180] *Yang Chu p'ien* ([181] *Lie tsī*, VII) where we read about a certain debauchee, Kung-sun Mu [182] by name, who [183] *tsê chī ch'ī wo t'o chē i ing chī* 'had selected young and beautiful (girls) in order to fill up' with them the many chambers of his harem. The above is, as far as one may judge from commentaries and reference books, the only early text support of Kuo P'o's expression [179] *wo-t'o* to be found, and it may seem striking at the first glance that it appears in a text which Chinese scholarship has placed in the Wei or Tsin period⁹⁷), i. e., the period when Kuo P'o himself lived, as against Western sinological science which considers the *Lie tsī* [181] as a text belonging to the pre-Christian era⁹⁸). One will perhaps be tempted to reason like this: as in the text in question—and nowhere else in old texts—appears an expression attested by Kuo P'o as being current in his time—and not before—, then we have one reason more, weak as it is, to consider the text as belonging to about the same period as that of Kuo P'o's life, i. e., the Tsin epoch. I think, however, that the fact is to be explained otherwise: in the early Han time in which Karlgren places the *Lie tsī* the expression [179] *wo t'o* must have been still a synonymical word-group with its constitutive monosyllables capable of being used alone, and one of them, viz. [171] *t'o* is actually attested by the *Fang-yen* as an independent dialectal word as late as about the beginning of our era; three hundred years later, in Kuo P'o's epoch, the group had already become one word [179] *wo-t'o* with its constitutive elements reduced to mere morphemes incapable of being used alone. The same must have become of many other archaic monosyllables, as instances of this kind occur by scores in Kuo P'o's glosses: in those to the short passage of *Fang-yen* out of which I have picked up but one example there are four other instances (though not so interesting from the 'literary'

⁹⁷) Cf., e. g., Feng Yu-lan [184], *A History of Chinese Philosophy*, transl. by D. Bodde, Peiping 1937, p. 6.

⁹⁸) See Karlgren, *Legends and Cults in Ancient China* in Bull. Mus. Far East. Ant. No. 18, 1946, pp. 203—204. Cf. also A. Waley, *Three Ways of Thought in Ancient China*, London 1946, pp. 257—258.

point of view as the one quoted) of dissyllabization of some kind or other as against monosyllabicity attested by the *Fang-yen* itself. Thus the period extending over the first three centuries of our era must have been that of intensive dissyllabization of Chinese vocabulary.

The reader will notice that with Kuo P'o's glosses we have made a considerable step forwards into the 1st millennium of our era. As Kuo P'o's glosses represent the spoken language of ca. 300 A. D. and the early Buddhist texts analysed by Maspero that of ca. 800, the one thousand years' gap we spoke of in the preceding has been reduced to about a half. This gap, always a considerable one, must be sprung over at this stage of research. Notwithstanding this, the writer hopes to have demonstrated that he had not been so irresponsible as it may have seemed at the first glance; indeed, he is bold enough to hope that he had good reasons to adopt the method which he actually adopted in working up the present modest contribution to the general history of the Chinese language.

Addenda

After the whole of the preceding article had been set the following additional notes are necessary:

Ad § 1. As Prof. H. Ułaszyn kindly informs me he had introduced the notion of morphoneme (i. e. morphophoneme) as early as 1927, cf. his articles *Kilka uwag terminologicznych (z dziedziny językoznawczej)* [Some Terminological Remarks Concerning Linguistic Science; in Polish], *Prace Filologiczne* XII, Warszawa 1927, pp. 405—415, and *Laut, Phonema, Morphonema*, *Travaux du Cercle Linguistique de Prague* IV, 1931, pp. 53—61. In the latter paper, p. 58, a morphoneme is defined as "ein Phonema in semasiologisch-morphologischer Funktion" which is nearly the same as 'phoneme functionally active' in terminology adopted in the present paper. Thus it seems easy to transpose the functional characterization of Chinese as given above into Prof. Ułaszyn's terminology: in archaic Chinese we have to do with morphonemes, as against modern

spoken Chinese where there are no morphonemes but only morphosyllables. — Let it be added that the term 'phoneme' was used in my paper in the sense of mere 'elementary sound of language'.

Ad p. 404, footnote 62. The modern word *tao-tê* [107] is equally attested as syntactical word group (arch. **d'ôg tak*) in early texts, e. g., in the *Li Ki* [185], Chapter *K'ü Li* [186]: *tao tê jen i fei li pu ch'eng* [187], rendered by Couvreur: 'Agendi ratio, interna virtus, humanitas, aequitas absque decentiae legibus non sunt absolutae' (*Li Ki* I, Hokenfou 1913; p. 5).

Ad p. 419, footnote 93. I learn from H. Wilhelm's *Second List of Sinological Books*, Mon. Ser. VIII, p. 345—346, about the enormous dictionary of compound expressions in 10 vols., *Lien-mien tsü-tien* [188] by Fu Ting-i [189], published in 1943, which according to the short bibliographical notice seems to be the best work of the kind; to this I could not have access.

In the writing of my paper I did not have access to the recent work of Wang Li [190] *Chung-kuo yü-fa li-lun* [191], Shanghai 1944 (reviewed by Yang Lien-sheng in *Harvard Journal of Asiatic Studies* X, 1, 1947, pp. 62—75), nor to the article *The Logical Structure of Chinese Words* by Chao Yüan-jen, *Language* XXII, 1 (1946).

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