

LOOKING AT THE PAST: a Description of the Visible Characteristics of the NeyYeh Chapter
of the *GoanTzyy*

by

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B.Sc., Trent University, 1984

A Thesis Submitted in Partial Fulfillment of the
Requirements for the Degree of

MASTER OF ARTS

in the Department of Pacific and Asian Studies

ACCEPTED

FACULTY OF GRADUATE STUDIES

We accept this thesis as conforming
to the required standard

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Abstract

In the past, scholarly work on the NeyYeh, the forty-ninth chapter in the *GoanTzyy*, has been undertaken from two perspectives: to explain where the text came from - its textual filiation; and to explain what it means - its textual exegesis. Much less work has been done on looking primarily at the features and characteristics of the text itself. A. C. Graham, in his work *Disputers of the Tao*, claimed that the NeyYeh was "possibly the oldest 'mystical' text in China" (Graham 1989, 100). If we are to take the remark seriously, then there is a pressing need to arrive at a general consensus on the most basic question - what is the NeyYeh? This thesis provides a mapping of the visible features - what the text is - and investigates some of the repercussions involved in the description of a specific text.

As an introductory study of a description of the visible features of the NeyYeh, the work of this thesis has produced new information in five areas: i) the history of the *GoanTzyy* text especially concerning the *pian* numbering and Liou Shianq's role in the redaction process, ii) identification of patterns of word usage in the NeyYeh and the creation of concordances derived from an index of the text using a typology based upon the *tzyh* (written character), iii) the application of a new descriptive technique, the **RIA** (Robinson Index of Agreement), to a Pre-Hann text, iv) a suggested partitioning of the text into six lexically distinct segments

based upon the **RIA** process, and v) a translation of the text emphasising the grammatical and lexical components of the NeyYeh.

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Acknowledgements

I would like to thank the University of Victoria for the financial support I have received. Specifically, thanks are given to Dean Lazarevich of Graduate Studies for providing me with a Dean's Scholarship for this academic year and to the Department of Pacific and Asian Studies for its generous support through scholarships and awards.

I would also like to express my appreciation for the support and encouragement of the members of the Pacific and Asian Studies Department. I would like to thank the Chair of the Department, Dr. M. Young, for his help in overcoming the many bureaucratic hurdles a special arrangement student faces and for taking the time out of his demanding schedule to supervise me in a reading course. I would also like to thank Mrs. J. Merritt and Mrs. A. Lee for all the help they have given me.

I would like to acknowledge the help of Dr. H. Hsiao who has been not only generous with his time and forbearance but also has been a source of constant encouragement. I would especially like to thank Dr. D. Bryant for his patience, zeal and generosity.

It is rare for any student to have access to the quality of scholarship and the range of insights both these professors have provided me. Their skill, enthusiasm, and discipline have left a lasting impression. It has been a privilege for me to begin my apprenticeship with them. I am grateful to them as only an apprentice can be.

Dedication

For my grandmother, Dorothy Mary Hall Reeve, my son, Andrew Charles Samuel, and my wife Noelle. Without their love, laughter and encouragement this thesis would not have been written.

Chapter 1 Introduction

1.1 Context and Boundaries of the Thesis

In the past, scholarly work on the NeyYeh, the forty-ninth chapter in the *GoanTzyy*, has been undertaken from two perspectives: to explain where the text came from - its textual filiation; and to explain what it means - its textual exegesis. Much less work has been done on looking primarily at the features and characteristics of the text itself. This kind of examination, when it occurs at all, has been undertaken either as part of efforts to explicate the text or to create a hypothetical original text.

There is a need to describe the NeyYeh - that is, the visible features of the text - and to provide tools by which one can move through this newly mapped text and thus, with reference to the text itself, bypass the circularity inherent in many exegetical arguments. The description process may perhaps provide new information for filiation studies. As well as assisting explorations into different forms and modes of Old Chinese Grammar, it may raise new questions regarding both the meaning and structure of the text.

This thesis provides a mapping of the visible features - what the text is - and investigates some of the repercussions involved in the description of a specific text. By creating this description, we create the ability to identify and to bring features and characteristics of the NeyYeh into a context from which they may be made intelligible. The explicit recognition

that our involvement in the descriptive process pre-determines the kinds of descriptions and subsequent contexts which may arise is a source for creating new contexts, and hence may create both new appreciations and understandings of the text. This thesis does not set out to provide an additional exploration of the hermeneutical issues within the text, though they are discussed.

A. C. Graham, in his work *Disputers of the Tao*, claimed that the NeyYeh was "possibly the oldest 'mystical' text in China" (Graham 1989, 100). If we are to take the remark seriously, then there is a pressing need to arrive at a general consensus on the most basic question - what is the NeyYeh? Such a question presents many levels on which one may investigate the text - what is it philosophically, religiously, semantically - but the question that is necessary to all of these is: what is the physical thing 'the NeyYeh'? The legitimacy of this question becomes greater as the doubts about the authenticity (that is, the certainty by which we understand both the original provenance and subsequent transmission of the text) and the meaning (the significance of what is being said in the text) become stronger.

This thesis will not reach conclusions concerning the authenticity of the NeyYeh though any investigation of authenticity and meaning in Pre-Hann texts presupposes some description of the text. Instead of discussing specific interpretations of the NeyYeh offered by scholars over the last two millennia, the thesis will devote itself to description. The descriptive process and its necessarily associated taxonomic concepts must be adequately described before significant discussion of 'meaning' can begin. A discussion of

these concepts is provided in this chapter after a brief summary of the history of the *GoanTzyy*. Chapter 2 focuses on certain theoretical problems inherent in the descriptive process and outlines some of the limitations of the descriptions developed by this thesis.

Chapter 3 will outline the implementation of the taxonomic framework developed in earlier chapters. A detailed application to the NeyYeh of a particular descriptive technique which arises out of the taxonomic framework follows in Chapter 4. Chapter 5 will briefly discuss the need to identify technical terms found in the NeyYeh. This discussion will be followed by a line by line translation of the NeyYeh, including observations and associated textual problems. Chapter 5 will also indicate possible partitions of the text based upon the descriptive technique applied in Chapter 4.

The final chapter will offer conclusions about the textual descriptive process and the implications it may have either for other texts or for other versions of the NeyYeh. The appendices contain information for the reader on how the data were obtained; a translation of the NeyYeh; and examples of the different kinds of components into which the text may be partitioned.

1.2 Outline of the History of the *GoanTzyy*

The *GoanTzyy* [the Master Goan] is titled after the historical figure, Goan Jonq of the

Spring and Autumn period [722- 481 B.C. (TH¹ 4,229)] who served as a high ranking official² in the government of Duke Hwan 桓公 [reigned 685 - 643 B.C. (TH 5,430)] of the State of Chyi 齊, whose borders, at that time, were located in the northern part of present day ShanDong (TH 5,002). Goan Jonq is said to have died in 645 B.C. (Rickett 1993, 244) after a long career establishing diplomatic liaisons between the various states and bringing power, wealth, and prestige to Duke Hwan (ShyyJih 2,131). Rosen argues that as the Warring States period progressed Goan Jonq becomes "a figure of almost mythic proportions" (1976, 431). Therefore, when discussing Goan Jonq, a separation must be made between the historical figure and the hagiography which surrounded his name. A further separation must be made when discussing the *GoanTzyy* between the text, the myth, and the man. Recent scholarship in this area has drawn clearer distinctions between these three facets, to the point where the *GoanTzyy* text has become identified more with early Chyi 齊 intellectual history than with Goan Jonq (see Rickett 1989).

According to Rickett, the general consensus on the origins of the *GoanTzyy* is it arose out of the JihShiah Academy 稷下 in the Chyi capital of LinTzy 臨淄 during the reign of King

¹The abbreviations TH and TY which appear in citations stand for the works 辭海 *Tsyh Hae* and 辭源 *Tsyh Yuan* respectively.

²References to Goan Jonq's title (*Shiang*) appear in the *TzuooJuann* 左傳 and *GwoYeu* 國語. Sydney Rosen, in his article "In search of the historical Kuan Chung", claims that the term 相 *shiang*, traditionally thought of as "serve as prime minister", does not apparently assume this meaning until near the end of the Warring States period [475 - 221 B.C. (TH 3536)]. Rosen suggests the role of "general advisor" especially in the area of diplomatic relations (1976, 432). Rickett describes Goan Jonq as "minister" (1965, 1985 & 1993). Hucker concurs with this more general description of *Shiang*, stating: "from high antiquity a title of distinction normally given only to senior officials in a ruler's central administration" (1985, 230).

Shiuan 宣王 [reigned 319-301 B.C. (TH 5,437)], as a compilation of many texts. Rickett puts the date of the compilation at around 302 B.C. (1985, 15). This consensual view also holds that the text is the collection of the work of several authors, one of whom may be Goan Jonq (1985, 16)³.

The existence of this early text associated with Goan Jonq, described as the "Proto-GoanTzyy" by Haloun (1951, 93), is suggested by direct references to a Goan Jonq-associated text in other works; for example, in the *HwaiNanTzyy* 淮南子 (21/7a) and in the *ShyyJih* 史記 (Ch. 62). These references, such as those by the putative author of the *ShyyJih*, SyMaa Chian 司馬遷 [145 - 85? B.C. (TY 466)], indicate a change in the corpus from what was available then to what was available even 100 years later.

SyMaa Chian claims to have read works attributed to Goan Jonq which no longer appear in the collection: "吾讀管氏《牧民》，《山高》，《乘馬》，《輕重》，《九府》... [I have read Goan's *Shepherding the People, Mountains and Heights, Carriages and Horses, the Light and the Heavy, the Nine Storehouses* . . .]" (SJ 2,136). The titles: *Shepherding the People, Carriages and Horses*, and *the Light and the Heavy* appear in the extant versions of the *GoanTzyy*. As for *Mountains and Heights* and *the Nine Storehouses*, Liou Shianq 劉向 [77-6 B.C. (TH 4,037)], in his bibliographical work

³The proportion of the *GoanTzyy* which is attributable to Goan Jonq and even to Goan Jonq 'thought' is highly variable. Rickett (1989) presents an overview of the debate among Chinese scholars over the last seventy years on this topic.

Bieh Luh 別錄, states he: "could not find a copy of *the Nine Storehouses* among the general populace, and that the work known as *Mountains and Heights* has another name, *Shyng Shyh*⁴ 形勢 《九府》書民間無有。《山高》一名《形勢》" (ShyyJih 2,136).

It is important to bear in mind, as van der Loon points out, that one should not assume that because the titles of the *pian* appear to have remained constant since the time of SyMaa Chian, the contents have also remained the same (1952, 303). In addition, when confronted with quotations and shared passages in other works contemporary with the Proto-*GoanTzyy* that exist in the extant *GoanTzyy*, assumptions that the *pian* title and surrounding text have remained invariant require qualification. Clearly, the history of the Proto-*GoanTzyy* corpus is highly speculative and care must be taken to avoid circularity.

It is Liou Shianq who provides a new synthesis of the *GoanTzyy* corpus with the creation of his redaction⁵ in approximately 26 B.C. At some time between 22 and 16 B.C. (van der Loon 1952, 359) Liou Shianq submitted a memorial, upon the completion of his collation of the existing *GoanTzyy* corpus, to the Hann Emperor Cherg 成帝 [reigned 32 B.C. - 7 A.D. (TH 5,441)]. This compilation was part of a larger book-gathering project commanded by the Emperor. The mandate of the edict was two-fold: to collect rare

⁴The second *pian* in the extant edition. See appendix F.

⁵Following Roth: a redaction being a new edition created from one or more ancestors (1993, 224).

books from throughout the Empire, and to bring together any rare editions of existing books and prepare a redaction. Copies written on bamboo strips were then to be placed in the Imperial library (Rickett 1985, 583).

Liou's memorial, one of the few from this project to have survived (van der Loon 1952, 360), is in the *Hann Shu* 漢書 (30.1b). In the memorial, Liou states that he collected a total of 564 *pian* 篇 (a bundle containing strips of cured bamboo, on which lines of text were written, then sewn together to form a discrete portion of a text)(TY 2365). Of these, Liou concluded that 484 *pian* were duplicates and established 86 *pian* as the basis for his redaction. Both Rickett and van der Loon feel that Liou must have split up some of the *pian*, since 484 from 564 would leave 80 *pian* not 86 (Rickett 1981, viii).

The implication from van der Loon's hypothesis is that Liou, in taking the original 80 *pian*, would have had to make a minimum of six splits of these original *pian*; this does not exclude the possibility that he divided an original *pian* more than once. If Liou made more than six splits he would have been forced to merge parts of at least two separate *pian* - forming a hybrid in his redaction. Both Rickett and van der Loon do not mention this implication, although Rickett does make the comment that: "a number of the present chapters are clearly made up of two or more fragments which appear to have been lumped together because of some similarity of content" (1981, viii). Thus, it seems, Rickett views the Liou compilation not to be a true redaction, but, because of his assumption of textual blending, the partial creation of Liou Shianq.

I would posit a much more cautious approach, especially in light of: i) the careful compilation process described by Liou; ii) the fact that in the editing of the texts Liou used the method of *chour jiaow* 讎校 "hostile comparison" (Riegel 1986, 584) which as Riegel describes it: "involved having a person offer textual emendations to a problematic passage for contextual reasons and then have such suggestions challenged by another scholar who acted 'as if he were the enemy'" (1986, 584) which would tend to reduce capriciousness; also, iii) because Liou Shianq was acting in an official capacity under edict from the Emperor, he was without the freedoms of a private scholar. This more cautious hypothesis contends that Liou Shianq did not merge any of the original 80 *pian* but did divide some of the *pian* up, as he must have if his addition is correct.

The corollary to this hypothesis is, therefore, that any textual merging took place either before or after Liou's redaction. To insinuate a less than meticulous redaction from Liou Shianq seems to lay the blame for the problem's difficulty at Liou's feet instead of our own. This assumption that Liou did not merge different *pian* is preferable to Rickett's and van der Loon's on two counts: it opens a line of questioning rather than closing one, as we are now forced to look in other places for evidence for the textual blending. It is also simpler. This assumption, however, is only simpler if a clear and straight-forward solution can be found to identify where Liou made the splits; the more convoluted the explanation, the less likely it is to be true, since our assumption is one of parsimony not necessity.

Any splits by Liou must then be clearly identifiable. It is, therefore, to the titles of the *pian* that we look first and not their content. Rickett, by discussing the content of the *pian* as verification of his assumption, adds an extra level of complexity to the question of the unaccounted six *pian* of the original 80 *pian*. There is no present method to determine that the content of some the *pian* - giving them their 'fragmentary' tone - have remained invariant. The case for the titles however seems to be one of relative stability. Along with Liou's innovation of the eight categories (see appendix F) van der Loon suggests that the *pian* titles of Liou Shianq's redaction have also remained invariant (1952, 303).

Pian numbers 80-86 (see appendix F) are all entitled *Ching Jonq* (the Light and the Heavy) and they are also numbered using the *TianGan*⁶ system from 1 to 7. They are the only *pian* so numbered in the *GoanTzyy*. Clearly, what Liou Shianq may have done is taken the original *pian* from which the *Ching Jonq* series is derived and split *it* six times⁷.

The implication of this hypothesis affects the classification of all the other *pian* in the *GoanTzyy*. Since the discrepancy of the six *pian* has been accounted for, this assumption

⁶ 天干 *TianGan* (Heavenly Stems) make up a set of ten characters used as serial numbers for counting and indexing. When combined with the Twelve Earthly Branches 地支 *dihjy* they are used to form the sexagenary date cycle. (TH 3,201).

⁷ I am ignoring any physical limitations which may exist on the size of individual *pian*. What I am offering is not the reason but a better assumption for the numerical discrepancy. This is a case where the assumption derived from 'seven pieces means six slices' is better than the assumption derived from 'fragmentary' tone, not a case of textual exegesis.

implies that the remaining 80 *pian* in the extant *GoanTzyy* correspond to individual *pian* in the Proto-*GoanTzyy*. This means that other *pian*, now extant, that would have been likely candidates for splitting by Liou, but accordingly were not (namely those *pian* whose titles form a series, such as: 大，中，小 匡 Dah, Jong, Sheau Kuang (*pian* 18, 19, 20), 君臣上，下 Jiun Chern Shanq, Shiah (*pian* 30, 31), 心術上，下 Shin Shuh Shanq, Shiah (*pian* 36, 37)) would have been identified with seven of the original *pian* in the corpus of the Proto-*GoanTzyy*. Similarly, those *pian* that have explanatory *pian* associated with them in Liou's *GoanTzyy* (that is, *pian* 63-67 in the 管子解 *GoanTzyy Jiee* category, see appendix F) would also have had similar explanatory *pian* in the original corpus.

From Liou's own comments, we assume there were cases where either one or more titles referred to the same text; for instance *Shan Gau* for *Shyng Shy* (see above, page 6).

Therefore, while the titles and the contents of the Proto-*GoanTzyy* remain opaque, this hypothesis allows us to glimpse portions of the structure of the pre-Liou Shianq corpus as well as the correspondences between some of the different *pian*, as evidenced through their number and their titles.

Compared to the bibliographic clarity of Liou Shianq's redaction, the information on the content and arrangement of the text over the next five centuries is considerably reduced; there is in fact no bibliographical information extant (van der Loon, 1952, 366). In 736, Jang ShoouJye 張守節, in his preface to 《史記正義》 *ShyyJih JenqYih*, quotes another work, the 《七略》 *Chi Liueh* by Roan ShiahShiuh 阮孝緒 [479-536 A.D.

(TH 1,085)], as dividing the *GoanTzyy* up into 18 *pian*. There are three areas of confusion, as discussed by van der Loon, concerning this important bibliographic reference to the *GoanTzyy*. The first is, *Liueh* should be written as *Luh* 錄. The second is, the work should not be confused with Liou Shianq's book of a similar title; this error has lead some scholars to claim the extant *GoanTzyy* is a forgery. The third is, *pian* is incorrect and this word should be replaced by the word *jiuann* 卷 as attested in Yeu JonqRong's 庾仲容 [476-549 A.D.(van der Loon 1952, 367)] 子鈔 *Tzyy Chau* (1952, 367).

A *jiuann* is a division based upon the silk scroll (TY 435). Therefore, from the time the *GoanTzyy* was placed in the Hann Imperial library to sometime in the fifth century at least one standard copy was set out on 18 silk scrolls. The extant versions of the *GoanTzyy* are divided into 24 *jiuann*. There is evidence of other editions from the Tarnq 唐 Dynasty [618-896 (TH 5,464)] onwards which contain 19, 20, and 30 *jiuann*. Extant editions still have commentary attributed to this time period, most notably: Yiin JyJang 尹知章 [died 718 (Jiow Tarnq Shu 189B/9)] and Farnq ShyuanLing 房玄齡 [579-648 (TH 4,130)]. The variation in the number of *jiuann* may be more a reflection of the size and authorship of commentary attached to the text rather than of any substantial changes to the text itself (see van der Loon 1952). From the Sixth century up to 1126 the number of *jiuann* fluctuates through the bibliographical record.

The discrepancy in the differing number of *jiuann* amongst these versions of the *GoanTzyy* cannot be accounted for bibliographically and remains an important question in the textual

history of the work. What is clear, however, is that the individual history of these various editions converge around the time of the sacking of the Capital of the Northern Song 宋 Dynasty 960-1126 (TH 5,472), KaiFeng 開封, in 1126 and the burning of the Imperial Library.

After the fall of the northern capital, the primary task of the BihShu Sheeng⁸ 秘書省, was to rebuild the Imperial Library in the new capital of the Southern Song 1127-1279 (TH 5,478), LinAn 臨安 (modern day Hangzhou 杭州). Jang Nieh 張嶠 [1096-1148 (van der Loon 1952, 382)], an official in the BihShu Sheeng, undertook to find a copy of the *GoanTzyy*. Finally in 1139 (van der Loon 1952, 382) he was able to borrow a private copy and from this he put together a manuscript copy. In the extant colophon he laments the difficulty of finding a copy of the *GoanTzyy* and is further frustrated by the amount of contamination in the text. After months of work he was able to emend about two-thirds of the errors he found in the text and with a generous sensitivity to all who would read the *GoanTzyy* after him stated: "those [corruptions] which were doubtful I set forth in a list; those which I could not explain I left, not daring to force a meaning" (Rickett 1985, 32).

It is important in understanding the history of the *GoanTzyy* to point out that, as stated by van der Loon: "the copy which Jang Nieh discovered in 1139 already consisted of the

⁸Hucker translates BihShu Sheeng as "the Department of the Palace Library" describing it as "a relatively autonomous agency of the central government generally in charge of maintaining the collection of the Emperor's official documents and at times compiling and editing historical records based on its archives" (1985, 378).

same 24 *jiuann* that we have at present" (1952, 384). Furthermore there is no evidence that the previous versions of the text which have differing number of *jiuann* survived past this time. This and other evidence seems to suggest that the 24 *jiuann* version may have been created within the century prior to Jang Nieh's research, but much more work needs to be done for these suggestions to be regarded as anything more than speculation.

The BeeiJing National Library holds a copy of the earliest extant printed edition of the *GoanTzyy* text. This edition, named after the author of the preface, Yang Chern 楊忱, also contains a copy of Jang Nieh's colophon. Rickett believes that the Yang edition may itself be based upon an earlier printed edition, named after the bookstore where it was printed and whose seal places the date of publication at 1152 (Rickett 1981, xxvi), MohBao Tarn 墨寶堂. The only known copy of this edition, also containing the Jang colophon, disappeared from DahLian 大連 in 1945 (Rickett 1985, 34).

There are two problems associated with dating the Yang edition. The first is that there is no exact date given in the preface, only the dynasty (Song) and a year number for the Sexagenary cycle; 甲申 *jea-shen*, the twenty-first year. This information implies plausible dates of 984-85, 1044-45, 1104-05, 1164-65, 1224-25, and 1284-85 (Shiue 1970, 437).

The second problem is that there is little consensus concerning the identity of Yang Chern.

There is a scholar with the name Yang Chern [1024-1064 (Rickett 1985, 33)] who would have been twenty years old in the year 1044. This Yang Chern was a very productive

scholar despite his brief life of 38 years. He is credited with the titles 文集 *Wen Jyi* in 10 *jiuann*, 春秋正論 *ChuenChiou JenqLuen* in 10 *jiuann*, 微言 *Uei Yan* in 10 *jiuann*, and 通例 *Tong Li* in 20 *jiuann* (宋人傳記資料引得 3,102). This respectable output would suggest not only was he capable of undertaking a scholarly project involving the *GoanTzyy* but also that it may have been of some interest to him in light of his work in the Spring and Autumn period as evidenced by the title of the *ChuenChiou JenqLuen* (Correct Opinions in the Spring and Autumn Period). There is, however, no official record of an edition of the *GoanTzyy* by Yang Chern. Rickett views this as one of the crucial factors against this Yang Chern being the one whose name appears on the *GoanTzyy* preface. The scholar Yang Chern was associated with the famous statesman Wang AnShyr 王安石 [1021-1086 (TH 3132)] and his edition would have most likely received official recognition (Rickett 1985, 33).

If this person is the Yang Chern of the *GoanTzyy* exemplar in BeeiJing then the implication is that either Jang Nieh used Yang's edition or some other synthesis of the two works (Jang Nieh's and Yang Chern's) took place between 1139 and 1284.

Guo MohRuoh, Haloun and Rickett all reject the hypothesis that this person is the right Yang Chern. Guo MohRuoh, in trying to ascribe a date, has suggested 1284 (Rickett 1985, 34) which would place its publication about five years into the Yuan 元 Dynasty [1279-1368 (TH 5,480)]. Haloun has suggested the date 1164 (Rickett 1985, 34).

Therefore, because of the lack of agreement it is difficult to be more precise in assigning a

date to the preface to the Yang edition, and by extension to the exemplar as a whole.

The Yang edition has been republished twice in the last 125 years: once in the Ching 清 Dynasty [1616-1912 (TH 5,486)], in 1879, and again in 1920 in the SyhBuh TsorngKan collection (SBTK) 《四部叢刊》. There may also be a separate textual tradition running parallel with the Yang edition whose antecedents may predate it, known as the Liu edition. The arguments put forward by Guo MohRuoh are based on a reported copy also in the BeeiJing National Library. Since the text has not been published and since only Guo seems to have seen it I am unable to discuss its authenticity or place in the textual tradition (see Rickett 1985).

The remaining 800 years of the transmission of the *GoanTzyy* will not be outlined here since it is the SyhBuh TsorngKan edition which is being used in this thesis. In the SBTK edition there are 10 missing *pian*: 21, 25, 34, 60-63, 70, 82, 86 (see appendix F).

According to references to the *GoanTzyy* dating from around 650-720, scholars speculate that these *pian* have been missing since at least 600 A.D. (van der Loon 1952, 387). *Pian* 50, whose content was presumably about the *Feng* 封 and *Sham* 禪 sacrifices, was also lost, yet instead of leaving a lacuna and marking the *pian* as lost 亡 *wanq*; standard in the SBTK edition, or missing 闕 *chiue*, sometimes used in the Jaw redaction of 1583 (van der Loon 1952, 386), chapter 28 of the ShyyJih has been inserted along with an explanatory note. This insertion of this chapter, which also discusses the *Feng* and *Sham* sacrifices, is

believed to have taken place before 650 A.D. (van der Loon 1952, 388).

Clearly, the history of the transmission of the *GoanTzyy* is very complex. Questions concerning all aspects of the *GoanTzyy* must be addressed on two fronts: the history of the transmission process - how it arrived from A to B - and what in fact was transmitted. It is the latter question to which this thesis addresses itself. In fact, the thesis is only concerned with describing a single *pian* in the *GoanTzyy*.

1.3 Selection of a Base Text

The choice of the **SBTK** text is partly arbitrary and yet partly determined by previous scholarship on the *NeyYeh* and *GoanTzyy*. The arbitrariness stems from the actual task at hand: description of the *NeyYeh*. There is no assumption that the **SBTK** *NeyYeh* is the 'best' among all possible choices. One of the aims of this thesis is to provide concrete information concerning what the **SBTK** *NeyYeh* is so that terms such as 'best' and 'preferable' may be replaced by terms that describe its content and not one's feeling about the text.

The Yang edition is, however, the edition most discussed by scholars working in either Chinese or English today. This may in part be due to the work of Guo MohRuoh (郭沫若), Wen YihDuo (聞一多), and Sheu WeiYuh (許維通) who published the *管子集校 GoanTzyy JyiJiaw* in 1956. This work brought together numerous Chinese

and Japanese sources containing interpretations and emendations to the *GoanTzyy*, greatly facilitating new interest and new questions about the *GoanTzyy*. As their base text, the authors chose the 1879 copy of the Yang edition. Likewise, W. Allyn Rickett, who has been working on *GoanTzyy* studies for almost 50 years in both his major works [1965, 1986] of translations and discussion of the *GoanTzyy*, uses the **SBTK** Yang edition.

It is perhaps better, for the descriptive process as a whole, to use the **SBTK** text as the basis for discussion in this thesis since the application of some of the descriptive methods outlined in subsequent chapters, e.g., the Robinson Index of Agreement (**RIA**), have not been applied to Chinese texts before. The assumption is that if this thesis is working from a better known edition, any challenges and refinements to these descriptive techniques may be identified more quickly, without having the distractions involved in working from a lesser known edition.

1.4 The Descriptive Process

The forty-ninth *pian* of the *GoanTzyy*, entitled NeyYeh, consists of two discrete elements which can be distinguished typographically: the text and the commentary. The text is in a larger typeface and the commentary, interspersed throughout, is in a smaller typeface (see appendix E). Traditionally, commentary is thought of as a separate entity, though in fact the relationship between commentary and text seems more symbiotic than independent. Each affects the other. Although the text invariably motivates the initial creation of

commentary, the commentary itself is sometimes able to sustain the history and the context of the body of the text.

This thesis will not describe any of the commentary in the **SBTK** NeyYeh. Since the thesis is an introductory study into a descriptive process, the added complexity of discussing the attached commentary as a separate feature of *pian* 49 will be left for another time.

Though this thesis will not offer a definition of what description is, it is important to bear in mind that a description is assumed to be associated with taxonomic concepts.

Taxonomy is, as discussed in the important work of Sneath and Sokal: "the theoretical study of classification including its bases, principles, procedures and rules" (1973, 3.)

Morton Beckner, in an attempt to discuss the nature of biological concepts, characterized the phenomena of taxonomy and related issues using the larger structure of polytypic concepts⁹. Beckner associates polytetic thinking with Wittgenstein's discussion of the importance the 'family resemblance' that words such as 'meaning', 'referring', and 'description' have in ordinary speech (1959, 23). This thesis, while not addressing these

⁹"A class is ordinarily defined by reference to a set of properties which are both necessary and sufficient (by stipulation) for membership in the class. It is possible, however, to define a group **K** in terms of a set **G** of properties f_1, f_2, \dots, f_n in a different manner. Suppose we have an aggregation of individuals (we shall not as yet call them a class) such that:

- 1) Each one possess a large (but unspecified) number of the properties in **G**
- 2) Each **f** in **G** is possessed by large numbers of these individuals; and
- 3) no **f** in **G** is possessed by every individual in the aggregate" (Beckner 1959, 22).

issues directly, will incorporate these broader observations into the narrow discussion of the NeyYeh to provide a firmer theoretical background to certain fundamental assumptions about description.

In order for any description to succeed, under almost any criteria in the field of Sinology, there are three dimensions of the process that must be articulated. The first dimension is the creation of a taxonomic structure, that is: a taxon¹⁰. Frequently taxa, or typologies as they are more commonly termed outside Biology¹¹, are defined under an equivalence relation¹². A typology allows for a clear and distinct mapping of an object to its unique class or type.

The second dimension of description is a context for the typology. There is, it seems, no predetermined number of partitions (features, to use Beckner's terminology), hence typologies, that may be assigned to any given set. This hypothesis appears self-evident.

¹⁰A taxon, as defined in Sneath and Sokal, is : "an abbreviation for taxonomic group of any nature or rank" (1975, 4).

¹¹For example Croft in his introduction (1990) considers taxonomy "roughly synonymous" with typology (1). In this thesis, however, typology is deemed to be "the study and identification of types" (OED, 1976,1258), and as such the difference between taxonomy and typology will be one of emphasis: typology emphasising particular classifications and how they are defined whereas taxonomy will emphasize the theoretical concepts of classification.

¹²A relation R defined on a set A is called an *equivalence relation* if it has the following three properties, where a , b , and c are arbitrary elements of A :

- | | |
|------------------------------------|--------------------------------|
| 1) aRa | (<i>reflexive property</i>) |
| 2) If aRb , then bRa | (<i>symmetric property</i>) |
| 3) If aRb and bRc , then aRc | (<i>transitive property</i>) |

(McCoy 1975, 20). For an example of the use of an equivalence relation in establishing the criteria for types applied in Pre-Hann studies, see Baxter's (1992) discussion of Rhyming on pages 89-91.

If, for example, the set of all human beings is divided into two types: those above 100 metres in height and those below, we have created a legitimate typology but it is trivial. Furthermore, any number of these inconsequential distinctions can be made.

Therefore, to create a successful typology, there must be some understanding of what an object is: both phenomenologically; that is, as an object or member of a set; and formally, that is, the qualities it possesses. Understanding the form of the object disallows algebraically possible yet ridiculous typologies, such as: humans; two door and hatchback.

Finally the third dimension of description must be the awareness that our involvement in the typological process pre-determines the description and subsequent contexts which may arise. Choosing, for example, to create a typology of humans based upon sex and handedness would produce five equivalence classes or types: Right-handed females (RHF), LHF, RHM, LHM, and Other. Any information about height, age, etc., is not available because in choosing one set of criteria others are excluded.

If the NeyYeh is to be described adequately, the scope of these three descriptive dimensions must be addressed: what is in fact being described (Chapter 1), with what collection of features (Chapters 3, 4 and 5), and how the identification process varies in relation to the identifier (Chapter 2).

Moving forward from the brief outline of the historical forces that produced the **SBTK** exemplar of the NeyYeh and from the discussion of the theoretical foundations of the description process, this thesis now focuses on the elements and features of a specific typology. A discussion of the utility and limitations of the proposed typology, based upon *tzyh*, in determining semantic content will precede a discussion of epistemological assumptions necessary in order to discuss "how we know what we know" and how this affects the description of the NeyYeh.

2.1 The *Tzyh* Typology

Clearly, the most striking formal feature of the NeyYeh is that it is a text. A text is composed of words¹. The NeyYeh is 1,565 characters in length and contains 370 different 字 *tzyh*, that is, written characters (see appendix B).

A typology of *tzyh* could be formed by treating each distinct *tzyh* as an equivalence class. The differences between *tzyh* are relatively easy to identify because they are based upon fairly unambiguous shapes. The identification of *tzyh* makes possible an analysis of the text based on quantifiable data, making the counting, relating and mapping of elements

¹This thesis will not attempt to define what 'word' might mean. Instead the assumption is that it represents some combination of semantic and phonemic value which can be used to form sentences.

within the text possible.

However, *tzyh* defined merely as written characters are not full words. Considered individually and without providing a semantic context, these *tzyh* cannot be guaranteed to have either a unique pronunciation or semantic value. In Pre-Hann Chinese, sound is a necessary component in understanding what words mean. The sinologist George Kennedy, in discussing the absurdity of trying to read Pre-Hann Chinese without considering phonetic content, rhetorically points out : "if meaning is dependent simply on writing, then the beneficiaries of Karlgren may shut up shop" (Li 1964, 465). *Tzyh* cannot exist as words in isolation, any more than 'read' as in "she read the book" can exist as a word in isolation. Jaw YuanRen, specifically dealing with the case where the pronunciation of a given *tzyh* is *known*, states: "the mere fact that the same character is used to write the same syllable does not guarantee that different meanings cannot be ascribed, synchronically or diachronically, to one etymon" (1959, 7).

The typology defined above, which treats the NeyYeh as a sequence of *tzyh*, is even less restrictive than the case Jaw is addressing since there may be no guarantee of a specific sound value. The indeterminate nature of isolated *tzyh* can be characterized by two broad observations. Firstly, the number of phonetically distinct syllables is finite (small), certainly less than the number of *tzyh* in the Pre-Hann Chinese lexicon. If we assume the "infinite generating capacity" of language, as Chomsky asserts (1968, 66) and extend this principle to the creation of syllables with a distinct semantic value, the potential size of the

semantic inventory is very large. Secondly, there can exist no mapping² from the inventory of syllables to the inventory of *tzyh*, due to the fact that a syllable may be represented by more than one character. For example, the Old Chinese reconstruction **kok* (Baxter 1992, 760) may be represented by 谷 *guu* [valley (Pulleyblank 1991, 110)] or 穀 *guu* [grain, cereal; good (Pulleyblank 1991, 111)]. Conversely there can be no mapping from the lexical inventory to the inventory of syllables. For example, 爲 which is reconstructed as **w(r)jaj* (Baxter 1992, 794), and is associated with the modern pronunciation *wei* [do, make; act as, constitute, become, be (Pulleyblank 1991, 320)], is also reconstructed as **w(r)jajs* (Baxter 1992, 794) and is associated with the modern pronunciation *wey* [for, on behalf of (Pulleyblank 1991, 322)]. There are many of these semantic-phonologically indeterminate *tzyh* in Chinese texts in general and in the NeyYeh in particular.

To provide some sense of the complexity involved in accommodating these indeterminate *tzyh* in a typology the following example is given. If the *tzyh* 爲 *wei/wey* was the only semantic-phonetically indeterminate *tzyh* in the NeyYeh (and in order to make the typology deterministic one could not read the surrounding *tzyh* to obtain a context) since the *tzyh* 爲 *wei/wey* occurs only 12 times in the text (see appendix B) this typology would give rise to a potential of 4,096 (2^{12}) ways of pronouncing the same exemplar. Clearly the utility of any such typology is exceedingly low, if one is trying to do anything more than

²"A mapping of a set **A** into a set **B** is a correspondence that associates with each element *a* of **A** a unique element *b* of **B**" (McCoy 1975, 13)

count the characters.

An additional consideration for a typology based upon *tzyh* is, of course, that the other formal qualities of a word (semantic and phonetic) are also part of the visual description of the NeyYeh. This is likewise the case when you read this page. What you see is the black ink organized in highly non-random formations on the white paper, but you also see this sentence and all that 'seeing' the sentence implies. Therefore, in order to describe what is seen in the NeyYeh there must be some discussion of the nature of describing semantic and even phonetic content in the NeyYeh.

The paradox of the *tzyh* is much like the paradox of Schrödinger's cat³: one cannot identify the *tzyh* as being in any real sense a word, until one observes the surrounding context (opens the box). Once one observes the surrounding context one is interacting with the text. Any attempt at identifying *tzyh* in the NeyYeh prior to regarding the context will be tremendously cumbersome, if not impossible, due to the non-deterministic characteristics inherent in the single word. The ultimate aim for the kind of description outlined in this thesis should be utility.

³"A cat is placed inside a box. Inside the box is a device which can release a gas, instantly killing the cat. A random event determines whether the gas is released or not. There is no way of knowing, outside of looking into the box, what happens inside it. . . Quantum mechanics says that the cat is in a kind of limbo represented by a wave function which contains the possibility that the cat is dead and the possibility that the cat is alive. When we look in the box, and not before, one of these possibilities actualizes and the other vanishes" (Zukov 1979, 85-86). The importance of the uncertainty principle which underlies this paradox is, as expressed by Hawking, that it: "signalled an end to Laplace's dream of a theory of science, a model of the universe that would be completely deterministic" (1988, 55). Similarly a deterministic model of language is also untenable.

Therefore, to provide a useful descriptive process, the remainder of this chapter will look at the assumptions of context more closely and will also state some assumptions about what the text is.

2.2 The Inherent Paradox of Epistemological Questioning

When Willard J. Peterson, in his article on the "Attached Verbalizations" in the *Book of Change*, states: "At the risk of reading too much into the text, I try to show how it makes sense." (1982, 68) his awareness of risk is used to fend off the hermeneutical hordes that "represent the imposition of post-Han concepts" (68). His articulation of risks is not, however, at the level of problems and analysis of the text but at the deeper level of epistemological assumptions. The only way one can tell if "too much" is too much is by knowing when enough is enough; this presupposes either that we know what the text is, with all its corruptions and follies, or that we are discussing what we can know about the text. The relationship between what the describer knows about the text and what the text is, is clearly not absolute within the epistemological framework or else the absolute statement becomes an epistemological issue. The relationship is instead relative within that framework.

We cannot know if, among other things, we are 'reading too much' or 'too little' into a text but our arguments can be tenable or untenable in relation to a set of other arguments.

Awareness of the relative nature of the epistemological relationship provides for a greater

range of discussion about the NeyYeh as well as the ability to disallow absolute statements of knowledge related to semantic issues.

To accept a set of epistemological assumptions is not a matter of convenience, it is a matter of necessity. The necessity lies in the fact that the discussion of anything: hot dogs, the European Economic Community, Targ Poetry, knowable and unknowable, must, by definition, challenge how we know what we know. It is only when we are discussing something whose ability to be known is at issue - Cosmology, History, Morality - that the challenge becomes contentious. Clearly, given the uncertain textual transmission and the high degree of abstraction within the NeyYeh, the ability of the **SBTK** NeyYeh to be known is at issue.

The epistemological nature of the work involved in identifying what is intelligible can lead us, because of the epistemological paradox, either to regard the NeyYeh as an example of the inherent structural problems of epistemology itself, or to accept some working assumptions of epistemological procedures from which distinctions can arise. Our concern is with the latter, yet we are ever subsumed in and thus cannot extricate ourselves from the former.

Arguments that rely on our knowledge (as we have shown that any description of the text beyond the level of *tzyh* does) are relative to each other and have no knowable value in absolute terms. Therefore, we need to recognize certain epistemological assumptions

within the descriptive process when we are describing something as elusive as words.

2.3 The Efficacy of Language

An important assumption this thesis makes in its reading of the NeyYeh is that language works. This is to say, the language used to create the NeyYeh is an intelligible, complete system of communication. This assumes, naïvely, that there are no prohibitive structural deficiencies in Pre-Hann Chinese. Anything desired to be said can be said. This perhaps is another extension of Chomsky's principle of "infinite generating capacity" mentioned earlier.

There are of course lexical deficiencies in any language. There is not, to my knowledge, a word or description in Pre-Hann Chinese for 'gigabyte' but hardly anyone would deny that such a word or description could be created⁴. All languages are dynamic and adapt. A mode of adaption is the ability to generate new words for new objects, states, activities.

This process of adaptability is not restricted to Pre-Hann Chinese. There may be no late twentieth century English word for 五行 *wuu shyng* [Five Elements (Peterson 1991, 185)] or 氣 *Chih*, nevertheless we allow the principle that English has the potential to embrace these terms and describe them as best it can. English usually adopts the nearest

⁴This ignores the objections to the fact that Classical Chinese (the literary language) may not be i) a spoken language and ii) is not a living one.

pronunciation of the foreign word and creates a technical term. For example Tao (Dao 道) has become, it seems, an English word for a series of ideas belonging to a particular belief system in another language and culture. For those with doubts about this, consider the difficulty in finding another word in Pre-Hann Chinese for *Chih* 氣, and even finding a word in Modern Mandarin for *Chih*.

2.4 Coherency

We assume the writer⁵ of the NeyYeh is, like any cosmologist, poet, or historian "constantly risking absurdity and death, whenever he performs above the heads of his audience" (Ferlinghetti 1958, 30). The profound clarity in these lines in Ferlinghetti's poem lies not in the assessment of the risks, but in the articulation of what the poets are doing up there in the first place.

The poet, he says, "is the super realist who must perform perceive taut truth before the taking of each stance or step in his supposed advance." It is the perform, from the Old French "by force," which the poet unavoidably, necessarily, must perceive. In trying to read and describe the NeyYeh, one has no choice but to accept the intentionality and to try to sense the force used to take "each stance or step." Thus, when the author of the NeyYeh stood at that place, in a past beyond measure, there was the necessary perception

⁵Given the description of the history of the text in Chapter 1, I do not want to place any pre-conditions on the authorship of the NeyYeh. The word 'writer' is used here to mean the process of authorship in general, and does not imply the NeyYeh was written by either a single author or is the collection of works by more than one author.

of "taut truth" and it was laid down by force.

The NeyYeh, by enduring the absurdities, the corruptions and the pull of larger forces acting upon it (e.g., the incessantly changing culture that guards and transmits its form), compels us to rely more heavily on our own belief that the perception of that 'taut truth' is coherent, which is: that the image is self-contained and that it was intelligible to its author.

2.4 Ambiguity

Ambiguity, as Jaw defines it, is "the property of a symbol in being understandable in more than one way" (1959, 1). But since we are working under the assumption of the author's intentionality, in our strict sense, ambiguity is a conscious introduction of elements to create more than one meaning. There is a distinct difference between ambiguity and confusion. Confusion is an error in usage, resulting in a statement of 'uncertain' / 'unacceptable' / 'unascertainable' meaning. Ambiguity is an acceptable, much sought after, attribute in communication. It creates a space where meaning can resonate, mature, transform. Confusion, however, being an error is unacceptable. It is an unbounded area where, as in the vacuum of space, there is no sound.

Ambiguity, because it is intentional means that the author said: "I want X to mean this or that" or "I want X to mean all these things." There is no need to suppose that the author is necessarily conscious of all the effects and resonances; nevertheless, the author is

conscious of the purposive commitment he is making. Perhaps other forms of ambiguity are possible but they don't seem to stand up to the transmission process because of the difficulty in identifying the source of the ambiguity.

Whereas to say "I am confused" means, with regard to a critical reading, "I am making a mistake somewhere in my processing of this information and so this information does not mean anything", to say "This is ambiguous" means "this statement does not mean one thing; it means many things". The more clearly we can separate these two states of reflection the freer we are to make constructive statements about how the text is functioning.

Thus in our description of the NeyYeh we allow for semantic ambiguity but do not allow for confusion. However confused we may be, and often are, we must insist that the author was not.

2.5 Interpreting Contradictions

Contradictions, whether syntactic, semantic, or stylistic, can and do exist within a text. It is important to consider that the message may be corrupt and therefore unintelligible.

These contradictions may be errors introduced into the text or as Harbsmeier points out, they may be grammatical mistakes made by the author (1981, 177).

We are bound by our epistemological assumptions to suppose that the problems, contradictions and unresolved issues in a text are primarily caused by the transmission process and not inherent in the text itself. Yet we are aware that theoretically we are at risk of making two kinds of mistakes when working with the text. The first, called a type I error in Statistics, erroneously accepts the claim that our hypothesis is false when it is in fact true (see Miller 1977, 195). This error has been characterised by Norcliffe as a "sin of commission" which discovers "significant relationships where none really exists" (1979, 35). In the present case, this implies that we have falsely supposed that the contradictions occurred during the writing of the text. The second kind of error we are susceptible to, a type II error, accepts the working hypothesis when it is in fact false - "a sin of omission" which fails to "identify a significant relationship where one actually exists" (Norcliffe 1979, 35). In the present case, this implies that we have 'omitted' real contradictions that the author included in the original text and falsely attributed them to errors in transmission of the text.

Both Type I and Type II errors are risks that never go away. But because in this case, at least, they are not independent of each other (that is, we do not allow for a third hypothesis) in order to decrease the risk of one type of error we increase the risk of the other. Protecting ourselves from making a type II error leaves us little or no text to work with because we make the assumption that the text is inherently flawed. We choose as an act of faith (height for Ferlinghetti), to allow ourselves more of the message to come through at the cost of having some of the garbled parts of the message be accepted as part

of the original message.

It is somewhat factitious to use the word *risk* here since textual studies is not traditionally thought of as probabilistic, yet the identification of these types of errors is useful in clarifying theoretical assumptions.

2.6 Self-Awareness

These textual presuppositions are an attempt to define, in a broader context, the calculus of a critical reading of a particular Pre-Hann text (that is, how the description and understanding of a text changes with time). These changes do not arise solely from societal changes and the tendency of each generation to bring to a text its own sensibility; they also occur in absolute terms. Each generation for the past three hundred years or so has had ever greater and more precise information about the text. The duration and extent of this increasing trend cannot be predicted but we can predict that the view of the text will change (either, at the very least, because our sensibilities will change or because a tomb will be excavated with a Pre-Hann copy of the NeyYeh found inside) and we must be vigilant that our argumentation is extensible.

This vigilance not only involves the elements of the text and language, but also how the scholar moves through the text with the language. Self-awareness is required to guard against those, like myself, who are prone to errors of ignorance of the language and

tradition and to guard against the actions of those scholars reared in the tradition and therefore prone to errors of prejudice. This self-awareness is a desperately needed check in a field so theoretically uncharted as Pre-Hann Studies (and possibly Sinology as a whole).

Uncharted, however, is not the same as untrodden. Our problem when confronting the tradition is its immensity and inter-connectedness. It is a psychic midden of the reflections and aspirations of a great number of people over a great length of time. Self awareness, that is, the explicit declaration of what you are doing and the theoretical basis which underpins the doing, is, it seems, the most effective way to establish provenance within this midden. The declaration is our datum point. With a datum point we gain extensibility.

2.7 Constraints on Knowledge

The analysis this thesis undertakes is bounded by three major constraints. First, there are the limitations imposed on the thesis due to my present skill level of Classical Chinese, that is to say, what I know both in and about the tradition. Second, there is the constraint which the NeyYeh (this particular aspect of the tradition), by its form, content and provenance, imposes on the reader. Third, there is the constraint of the current knowledge of how Pre-Hann Chinese works as a language, its phonology, semantics, syntax, (how the tradition is transmitted and even what is transmitted). Each of these three constraints

imposes limitations on what one can describe about the visible characteristics of the text and, moreover, each constraint is linked to the others, enveloping the text so that any change in one constraint will affect the boundaries of the other constraints.

To ignore one component of this textual dynamic is to lose an entire dimension the experience of seeing and ultimately reading the text. Identifying as many constraints on the descriptive process as possible fundamentally improves the accuracy of the description itself.

This chapter's discussion of the strengths and weaknesses of the *tzyh* typology and the epistemological assumptions related to the study of the text provides the context for Chapter 3 which will outline the application of the *tzyh* typology to the **SBTK** NeyYeh.

3.1 The Indexing of the Text

This chapter will outline the taxonomic framework developed for the **SBTK** NeyYeh, using the *tzyh* typology introduced in Chapter 2. The discussion will focus on how the typology was implemented and the subsequent three main descriptions of the text that arise from it: pattern matching, lexical variation and translation.

In order for a classification and subsequent formation of a *tzyh* inventory to proceed it was necessary for the text to be indexed. This indexing was achieved by placing the *tzyh* of the NeyYeh into a database containing two fields: **PlaceNumber**, indicating the order in which the *tzyh* appear in the text, and **TzyhNumber**, the serial number identifying each unique *tzyh* type.

3.2 Parameters to Determine Uniqueness of the *Tzyh* Types

Determining the criteria for establishing the uniqueness of *tzyh* (that is, the *tzyh* typology) involves an assessment of the desired outcomes for the typology itself. Since the main focus of this thesis is a visual description of the text, the *tzyh* were classified based upon their visual characteristics and not upon more standard classifications systems that rely on semantic content, such as reading and emendation. That is, it is not part of the *tzyh* typology to identify a *tzyh* by saying, for example: "this *tzyh* 馬 *maa* means *horse*" or, as is

common with a disputed text, "this *tzyh* should mean *horse*."

Similarly the typology ignores the distinctions created by *tzyh* with more than one phonetic value. The *tzyh* 廣 can be pronounced either as *goang* or *kuang*, each pronunciation having different semantic implications. For the purposes of identification and discussion, this *tzyh* was arbitrarily assigned the pronunciation of *kuang* in the reference material provided in this thesis. In the *tzyh* typology, however, it is considered to be *tzyh* type number 390.

A single example of classification based upon an emended character is the occurrence of 馬 *maa* at the end of line 201 (see appendix D). This *tzyh* is used to signify¹ the word 焉 *ian* "a final particle, to it, in it, there, etc" (Pulleyblank 1991, 356). Whether this lexical feature of the text is an intentional substitution or a scribal error is an issue ignored by the typology used in this thesis and the *tzyh* is indexed as an occurrence of *maa* and not *ian*.

This kind of classification, based upon visual characteristics, meant that typographical variants of *tzyh* with identical semantic content fell into two different *tzyh* types. For example, the *tzyh* 淫 *yn* [soak; excessive; licentious, lewd (Pulleyblank 1991, 372)] found in line 250 is also written in line 54 as 淫. There are 12 of these typographical variants

¹It is quite clear that the *tzyh* in this line is 馬 *maa* and not 焉 *ian*. Guo (1956, 788), in his note on the line regarding another issue, does not mention the existence of this variant but instead quotes the line using 焉 *ian*.

identified in the SBTK NeyYeh² (see table 1).

Table 1 Typographical Variants Identified in the NeyYeh

Tzyh Number	Tzyh	GR	Total Frequency	Individual Frequency	Observation
372	老	lao	2	1	standard version
372	耂	lao	2	1	with 'gong' component
96	渺	meau	4	2	with 'water' signific
153	眇	meau	4	2	without 'water' signific
135	胷	shionq	4	1	with 'meat' signific
386	匈	shionq	4	3	without 'meat' signific
69	刑	shyng	17	2	once written for 'form'
124	形	shyng	17	15	standard version
23	藏	tsarng	4	3	with 'grass' signific
376	臧	tsarng	4	1	without 'grass' signific
127	淫	yn	6	4	two extra strokes
407	淫	yn	6	2	standard version

²The decision to divide the two variant forms of *lao* 老 into separate types was made after the index was used to create the lexical descriptions in this thesis.

It is important to note that typographical variations may provide clues to the provenance of different segments of the text. Not only were typographical variants within the text identified as separate *tzyh* types, but typographical variants with respect to standard written practice were given separate *tzyh* types. For example the *tzyh* 敬 *jinq* [respect; respectfully (Pulleyblank 1991, 159)] is consistently written without the final stroke in the *tzyh* component 女 *pu*. This phenomenon of a missing last stroke also occurs in line 314 with the lone use of 徵 *jeng* [summon; test, prove (Pulleyblank 1991, 403)], again involving the component *pu*. Other *tzyh* written with this component found in the text appear unaffected by this phenomenon (see table 2). This thesis will not discuss the possible reasons for the occurrence of this specific phenomenon but it should be noted that there have been extensive prohibitions of various forms concerning the writing of specific *tzyh* throughout the history of China³.

Furthermore, with regard to variants and the *tzyh* typology, there is one suspicious looking *tzyh* in line 47 that looks as if someone has taken a brush to the original *tzyh* 月 *yueh* [moon; month (Pulleyblank 1991, 388)] and added a single downward stroke emending this *tzyh* to 用 *yong* [use; sacrifice (Pulleyblank 1991, 377)]. This is mentioned because this variant, *yueh*, appears in an exemplar of the NeyYeh found in 管子輯評 by the Ming dynasty author Ling RuuHeng 凌汝亨 (1970, 247). However, in this index,

³These words are broadly defined as 諱字 *huey tzyh* "taboo words". See Graham (1978, 85-87) for further information concerning 'taboo' words.

Table 2 Tzyh Examined for Missing Strokes

GR	Tzyh
aw	傲
ay	愛
bay	敗
biann	變
bih	敝
chiaw	竅
fuh	復
gaan	敢
guh	故
iou	憂
jyh	致
leu	履
ling	陵
shiah	夏
yan	嚴

this *tzyh* is classified as belonging to the *yueh tzyh* type.

While individual variations are perhaps unimportant in and of themselves, any tendencies or clusters of anomalies may be numerous enough to convince scholars that these measurable differences are significant. These variations may also be added to the body of evidence in other aspects of investigation to provide more intricate lexical distinctions within the text. These typographical anomalies will not be discussed specifically in the

thesis but serve as part of the theoretical foundation for the basis of the *tzyh* typology.

3.3 Identifying *Tzyh*

The criteria to determine if a given *tzyh* belongs to a particular *tzyh* type is a process of identification involving roughly three steps. The first is to determine if the *tzyh* to be identified has the same general appearance as the representative member of a specific type.

The second step is to determine if all the constituent parts of the *tzyh* to be identified are approximately the same as the representative *tzyh*. This stage of the identification considers the *tzyh* to be an aggregate of a small number of common sequences of strokes traditionally used to write the *tzyh*. These sequences may include significs (or more commonly called 'radicals') and other well known stroke combinations used to deconstruct *tzyh*: both for the purposes of looking words up in a dictionary and for teaching people to write characters. This thesis will not attempt to define more precisely the composition of this collection of parts of *tzyh* because it focuses on identifying equivalent and near-equivalent elements of the *tzyh* without being concerned about the typological properties of those elements themselves.

The third step in identification is to determine if the stroke count in these elements is the same. As an example, if one considers the types for 淫 *yn* discussed above, both the *tzyh*

types found for this single word are equivalent under the rules of the first two criteria listed but because the *tzyh* 淫 has two more strokes than the *tzyh* 淫 (in the "wang" 王 element) they become two distinct types.

The criterion that each constituent part of the *tzyh* to be classified must be exactly identical to the corresponding element in the representative *tzyh* type was not adhered to. Under this more rigid criterion a *tzyh* such as *hay* written 害 in line 227 and 害 in line 260 (where the downward stroke goes beyond the horizontal third line) would be classified as two distinct *tzyh* types. Due to the added complexity in both establishing a meaningful universal rule of constituent element identity (given the variation in the printing process used to produce the **SBTK** *NeyYeh*) and the fact that this thesis is a preliminary study, the added complexity seemed uncalled for though not unimportant.

It should be noted that theoretically this process could be made deterministic, that is, identification rules once firmly established could be applied to any *tzyh* to produce a correct classification each time regardless of the context in which the *tzyh* was set.

However, the reality at this early stage of development in the identification process seems to be more of an heuristic process whereby the rules of identification are being modified at the same time as the *tzyh* are being classified. Each new insight into the process of identification may rearrange the elements within the *tzyh* typology.

As these identification rules were established, the index was created. The index is still

provisional although any future modifications in classification criterion will affect only a small number of *tzyh*.

3.4 Three Descriptive Processes

Once the text was indexed three methods of description were pursued: pattern matching, lexical variation, and a translation. Both pattern matching and lexical variation are based solely on the *tzyh* typology. Lexical variation will be discussed in chapter 4. The translation will be provided in Chapter 5.

Before a translation could be made from the indexed **SBTK** exemplar, punctuation had to be imposed upon the text. This punctuation takes the form of dividing the text into lines and is a highly subjective process based upon three broad criteria: semantic breaks in the text; assumptions about rhythm, rhyme and line size; and thirdly, tradition (observations of other scholars either in the form of the commentary in the text or in separate discussions).

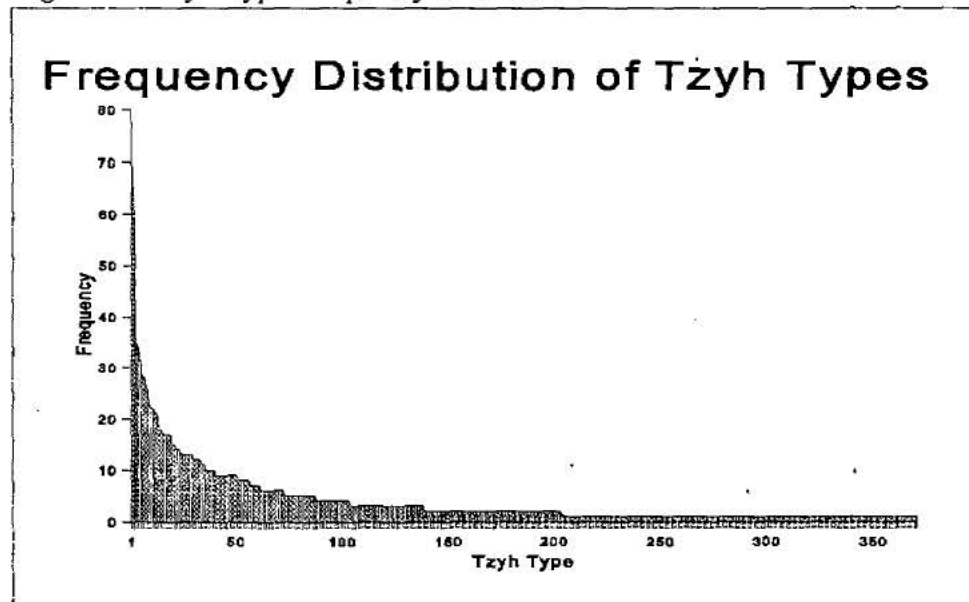
Newline markers, a feature included in appendix D, were not considered part of the *tzyh* typology. These **Newline** markers make up approximately 20% of the index (396 of 1961 *tzyh* in the indexed text). It seems that the issue of what constitutes a line of text in the NeyYeh, while being indispensable in a study of semantic content, is unnecessary to

the *tzyh* typology. These markers were filtered out of the index before the lexical descriptions outlined in the next chapter were conducted.

A printout of the **SBTK** text with the **TzyhNumber**, the 國語羅馬字 GwoYeu LuoMaaTzyh (GR) pronunciation, and Baxter's (1991) reconstruction (if the given *tzyh* appears as rhyme word in the *ShyJing*) and an example of the image of the *tzyh* type is found in appendix D.

The distribution of the frequency of each *tzyh* type indicates that a very few *tzyh* account for the vast majority of the inventory (see figure 2). Coupled with the fact that 20% of the NeyYeh is signified by **Newline** markers, it is the words which appear infrequently that provide the bulk of the semantic diversity, while the **Newline** markers and high frequency

Figure 1 Tzyh Type Frequency Distribution



words provide the semantic structure.

3.5 Pattern Matching and Concordances

The first type of description to be discussed resulting from the creation of the index is pattern matching. There are two types of pattern matching investigated in this thesis: the concordance and the matching of discrete patterns. It was possible to create a concordance from the index, thereby mapping the *tzyh* in the text to their *tzyh* types in the concordance. The concordance (found in appendix B) includes: an example of the image of the *tzyh* type; the location in the text according to the line number (with the **PlaceNumber** in parenthesis), the frequency of the *tzyh* type in the NeyYeh; the GwoYeu LuoMaaTzyh (GR) pronunciation; the Old Chinese reconstruction if available from Baxter (1991); the Rhyme group also from Baxter (1991); and the **TzyhNumber**.

If the *tzyh* was not a *ShyJing* Rhyme word as identified by Baxter, it is either described as existing in the 毛詩引|得 *MaoShy YiinDer* concordance to the *ShyJing* by the abbreviation **SJ** or if it is not in the *ShyJing* by the abbreviation **!SJ**. This information is contained in the concordance for two reasons. The first is subjective: I wanted to know what the NeyYeh might have sounded like. Phonetic rhythm is, I believe, a reaffirmation of how the words should be listened to. The meter, the rhymes, along with the myriad subtleties of lexical harmony and dissonance, all establish the direction in which the words

will lead the reader - the listener. In order to assess where semantic breaks occur, all semantic components come into play and surely sound is one of the more important components.

The choice of using Baxter's Old Chinese reconstructions is one of convenience not one of endorsement. The highly contentious world of Old Chinese Phonology is completely beyond the scope of this thesis. But sound, because it is the *modus vivendi* of semantic content, is a consideration in a great many opinions concerning how the NeyYeh is to be read, not just in the present case but in traditional scholarship since the end of the Ming dynasty and the rise of the great Ching dynasty philologists.

The second reason for relating the *tzyh* in the NeyYeh to words in the *ShyJing* is that the reconstructions provide an indication of how the *ShyJing* compares to the NeyYeh lexically. According to the concordance in appendix B, of the 370 *tzyh* types identified in the NeyYeh: 232 are rhyme words of the *ShyJing* as listed by Baxter; 80 *tzyh* are found in the *MaoShy YiinDer* but are not rhyme words; and 58 *tzyh* are not found in the *ShyJing*. It should be noted that with a few exceptions these 58 *tzyh* occur in the NeyYeh with a relatively low frequency. While this is not a systematic comparison, it may provide the motivation for future inquiries to establish the identity of *tzyh* that occur only within a given text and nowhere else in the extant corpus (continuing in the tradition of A. C. Graham's work on the *MohTzyy*).

Using the initial index, reference materials relating to more precise searches based upon the concordance format can be created. Specifically, searching for contiguous strings in lengths of two or more *tzyh* is made possible. Four of these *tzyh*-string type concordances were created ranging from pairs of *tzyh* up to strings of five *tzyh* in length. Although essentially redundant once the single *tzyh* concordance has been created, these lists are quite useful as a quick reference to recurring phrases or lines within the text (see appendix B).

The concordances also provided assistance to overcome problems related to coherency. The concordances allow one to relate specific, local instances of problems of meaning to the whole text. These specific instances can be abstracted into more general patterns and the concordances can then be used to find other examples of this more general type to assist in understanding.

For example, a difficulty arose in understanding the distinction between the expressions 謂之 *wey jy* and 是謂 *shyh wey*. It was very hard to resolve the distinctions in meaning at the local level (that is, just seeing the phrases every so often) to determine if there was a technical aspect in the use of these phrases. Using the concordances to compare all the examples of both phrases found in the text, I was able to formulate an hypothesis that in the NeyYeh one could translate the phrase *wey jy X* as "Call this thing X" and *shyh wey X* as "This process/action is called X".

It is not important to discuss here the merits of the hypothesis but more importantly, to state that an hypothesis was generated from data contained in the concordances.

Similarly, if one were to contend that the above hypothesis was false then the concordances might be useful in refuting the original claim.

The second type of pattern matching explored was the matching of strings of discrete *tzyh* patterns. These matchings enabled the listing of two strings of *tzyh*, **A** and **B**, of a predetermined length, separated by a *tzyh*-string **X** whose content was unspecified. For example, in the pattern of the form $(a_1+a_2) + X + B$ where **A** is a *tzyh* string composed of two contiguous *tzyh*, **X** is a wildcard string of length 1, **B** is a *tzyh* string of length 1, one sees that the pattern 人之X也 *ren jy X yee* occurs four times in the NeyYeh, at lines 111, 306, 324, and 369.

The computer program designed to create both types of pattern matching methods - the concordances and the discrete pattern matching - is found in appendix C with examples of the *tzyh* string patterns found in appendix B.

3.6 Utility

There are two observations that should be made about these descriptions of the text. The first is that these descriptions are reference aids; their high utility is almost inversely proportional to the amount of creative and emotional significance they reveal.

The second observation is that the two pattern types seem to elucidate different kinds of information from the text. The *tzyh* strings describe the amount of *tzyh* repetition: what is there and how many times it occurs. The pattern matching types, on the other hand, emphasize structure: the range of possibilities which exists for a particular structure within the NeyYeh. The pattern matching identifies patterns that are of more syntactic interest than the *tzyh* string patterns.

This chapter has described one aspect of applying the *tzyh* typology to the **SBTK** NeyYeh in order to identify pattern matching and create concordances. Chapter 4 provides a detailed look at the structure underlying the patterns, that is, the lexical content and variation in the NeyYeh.

4.1 A Structural Inventory of Lexical Change

This chapter will discuss a specific method for determining lexical change within the NeyYeh and propose a partitioning of the text based upon regions of lexical similarity. It is evident from reading the text that there is a change in the vocabulary, not just in the use of words but also in their frequency of occurrence throughout the text. From this initial observation the motivation arose to characterize more comprehensively these changes in the NeyYeh. If anything comprehensive was to be said about the change in the vocabulary, the analysis had to be conducted at the level of the *tzyh* typology initially and subsequently take into consideration the entire lexical inventory. Tracking the use of *one word* or a *set of words* through the text seems more suited to a discussion of style and theme than to total changes in lexical use. However, a description process which allows one to track *all* the words, as manifested in the *tzyh* typology, identifies interesting patterns which can then be associated with contextual studies in future research.

In order to describe the lexical variation within the text a measure was needed that was both simple to understand and convenient to apply. The Robinson Index of Agreement (**RIA**) was chosen to provide this measure. The **RIA**, applied widely in archeology¹,

¹W. S. Robinson, for whom this index is named, published his important paper "A method for chronologically ordering archeological deposits" in 1951. It was, as Dunnell describes it, "the first really 'quantitative method' in archeology and it changed the direction of seriation studies abruptly" (1983, 532). An interesting and didactic application of the **RIA** to an archeological problem is Macdonald's "The Bang Site, Thailand; an alternate analysis".

provides an index number from 1 to 200. The higher the number the greater the similarity between two assemblages: or in the present case, sections of the text. The formula for calculating the **RIA** is:

$$RIA = 200 - \sum_{i=1}^n \left\| \frac{a_i}{A} - \frac{b_i}{B} \right\| \quad \text{where } A, B \text{ are } \sum_{i=1}^n x_i \text{ such that } x \in X.$$

Applying this formula to the NeyYeh, lexical variation can be measured by treating each distinct *tzyh* as a type (the x_i) (that is, as an equivalence class) and by treating two arbitrary lengths of text as the 'assemblages' to be compared (the **A** and **B**). The **RIA** is quite useful in that it not only takes into consideration the frequency of a given *tzyh* type (the x_i) but also takes into consideration the proportion with which it occurs in a given section (the x_i/X). This weighting allows sections of varying lengths to be compared.

No assumptions as to where semantic breaks occur within the text were made, even though the **SBTK** does have three paragraph breaks at the ends of lines 65, 96, and 244. Instead the decision was made to break the text up into equal size segments. This choice, while perhaps wasteful of information, maintained a distance from the text which allowed several runs using various initial sized segments to be made, to see if any useful information emerged without any prior constraints as to whether it made semantic sense to partition the text in such a way or not.

This entire process, it should be stressed, is a descriptive measure and not inferential one². There is no probability distribution associated with these descriptions. Descriptive measures are statements of facts, just as temperatures read from a thermometer are statements of facts. Inferential questions, such as whether a specific temperature is above or below normal, to continue the analogy, will not be addressed.

Also, due to the descriptive nature of the analysis, there is no objective determination for what constitutes significant difference among the sections of the Ney Yeh. Determining at what point or at what range of **RIA** scores two sections become 'alike', 'very alike', or 'really different' is not possible using objective criteria. These ranges or *phenons* as defined by Sneath and Sokal (1973, 295) are arbitrary, and relate to the relative criteria determined by the field of study and the object or phenomenon being measured. This arbitrariness can be illustrated again through the example of temperature: one must recognize that to define 'cold' as being those temperatures which fall within the range of 0° C to 7° C is arbitrary.

This lack of objective criteria relates to the broader issue in taxonomy as outlined in Sneath and Sokal, namely that there is "no satisfactory absolute criteria for taxonomic rank". Again this can be intuitively felt by the observation that 'cold' in Moose Jaw is not the same thing as 'cold' in Bangkok.

²See Miller (1977, 2) for a fuller discussion of the difference between inferential statistics and descriptive statistics.

Hence interpreting the results of the **RIA** similarity coefficients for the NeyYeh is neither objective nor is it bounded by experience, since this procedure has not been conducted previously, to my knowledge, on texts of this type. Without a foundation of experience, there is no touchstone by which to gauge significance. If one were to land on another planet and take the temperature there would be no way of determining what 'cold' was or if it was 'cold' for this time of the year, until enough data had accumulated whereby a confidence in the range of variation and the continuity of the process had been established.

4.2 The Initial Division

It is for the above two reasons of uncertainty that 11 sets of data - divisions of the text from 3 segments to 13 segments - were identified. For each set or division of data **RIA** scores were calculated comparing all the segments in that division. The scores were then placed in a matrix with every column and row representing a segment. The segments in the matrix are identified as **a, b, c, . . .** etc. (for example see page 62, table 5). The results of these calculations were used to determine not only the stability of the process, but which, if any of these divisions yielded the 'best' characterization of the text. 'Best' is intentionally used here to convey the arbitrary and untested state of the phenon, in the hope that its vulgarity will attract critical discussion and refinement by others.

The definition of 'best' must, by agreement, initially satisfy three requirements. The first is

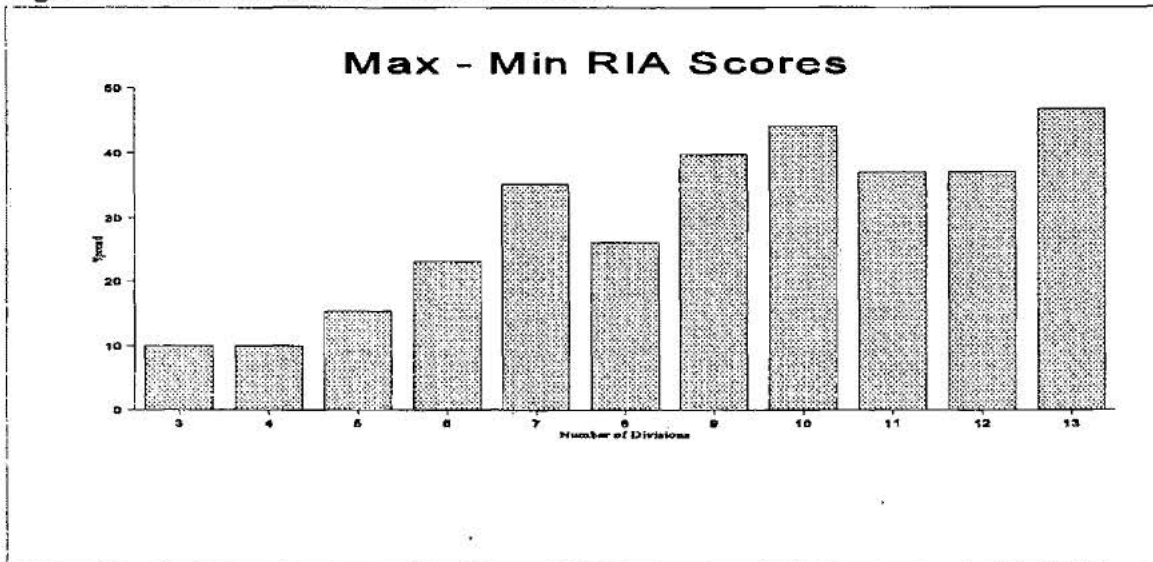
that the spread or difference between the highest **RIA** score and the lowest in a given division should be large. This criterion provides a greater range of distinction between segments of the text.

If, however, the number of segments in a division is high there is a greater likelihood that the **RIA** scores of these segments will begin to oscillate from very high scores (being almost identical) to very low scores (being almost totally dissimilar).

To prevent this trivial situation from interfering with the selection process, the second requirement is that the number of divisions should be small. This criterion serves two functions: the first outlined above, is that it is a check against meaningless oscillations, and the second is that it recognizes the efficacy of parsimony. If two divisions of the text have the same spread between the maximum and minimum **RIA** scores the 'better' one will be the one with fewer segments. In figure 2, which outlines the **RIA** spreads for the various divisions, it can be seen that the text divided into 11 segments or 12 segments produces the same spread of 37 **RIA** points, thus **RIA**(11) would be chosen over **RIA**(12) because it explains the same amount of variation using fewer segments.

The third requirement for producing the 'best' characterization of the text is that the maximum **RIA** for a given section should be high. The maximum **RIA** scores tend to

Figure 2 Maximum and Minimum **RIA** Scores



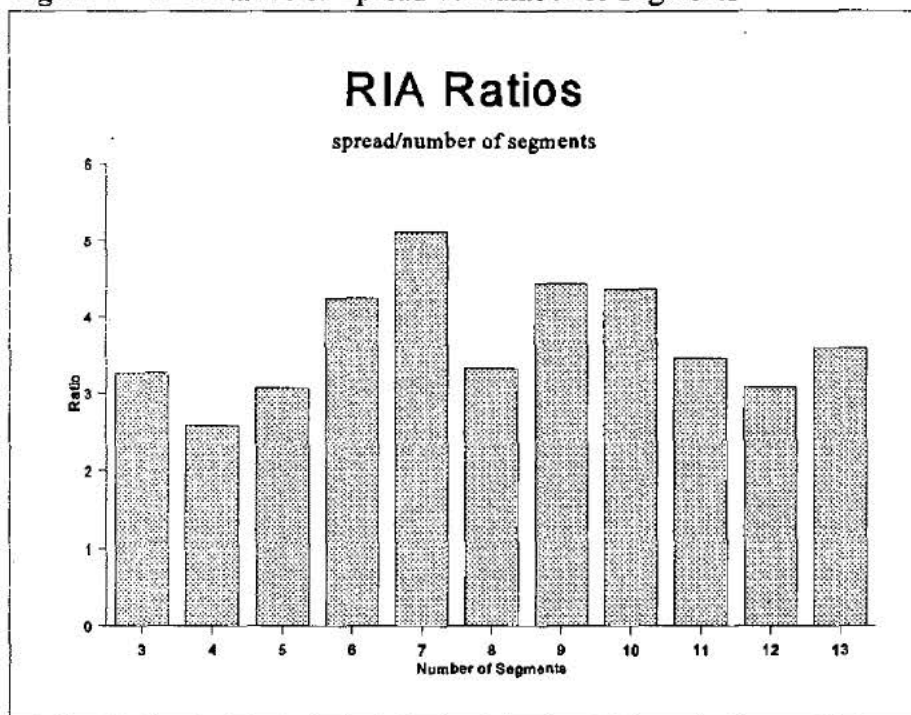
decrease as the NeyYeh is divided into more segments (see table 3). Thus the greater the number of segments, the more generalised the lexical similarity becomes, up to the point of oscillation. There are, as yet, no criteria for what phenon constitutes 'too generalized'. It must be remembered that even the highest score obtained in this experiment may be below the threshold of significance. This third criterion is a reminder that distinctions within the higher ranges of **RIA** values are of more interest because they reveal stronger associations.

From figure 2 it is clear that **RIA**(13), **RIA**(10), **RIA**(9) and **RIA**(7) cover the largest

spread.

Yet if one considers which of the divisions is the most efficient in covering its spread (that is, covers the widest spread with the least number of segments), **RIA(7)** is the most efficient with **RIA(10)** third most efficient with respect to their Total **RIA** Ratio scores (see figure 3).

Figure 3 RIA Ratios of Spread vs Number of Segments



This efficiency rating is however, somewhat misleading as it overemphasises the importance of a division with a small number of segments when compared with a division of almost as small a number of segments. For example **RIA(6)** has a spread that is only 66% of the spread of **RIA(7)** (see figure 2) yet the **RIA(6)** ratio is 84% of **RIA(7)**'s ratio

(see table 3) indicating a somewhat misleading importance to the **RIA(6)** ratio.

The product of these two criteria, that is $\text{ratio} \times \text{spread}$ (which is in fact $(\text{maxRIA}(n)) -$

Table 3 RIA Data for 3 to 13 Equal Divisions of the Text

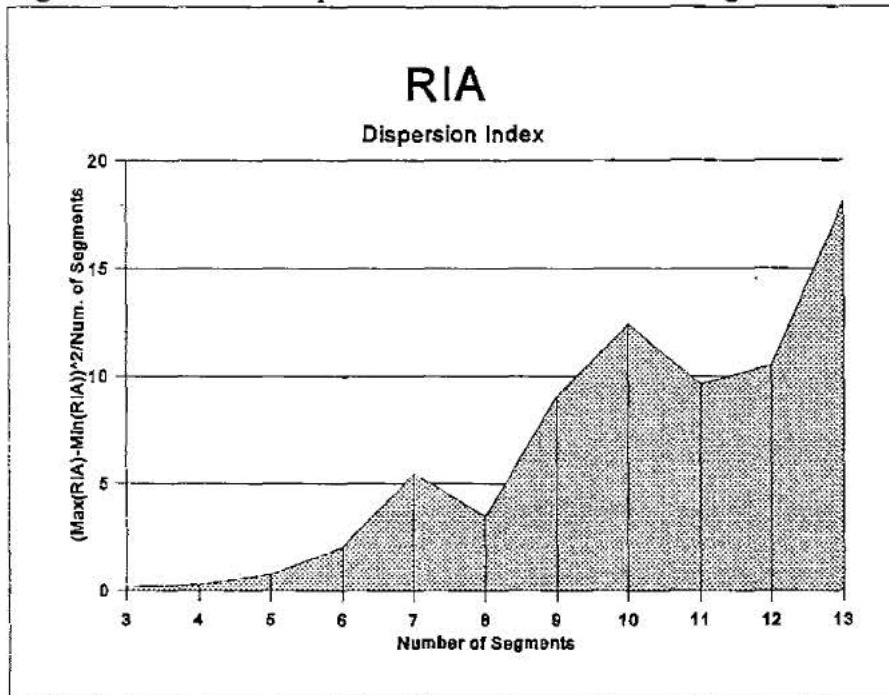
RIA Data for 3 to 13 Segments

	3	4	5	6	7	8	9	10	11	12	13
length of section in tzyh	522	391	313	261	224	196	174	157	142	130	120
rate of length decrease		25%	20%	17%	14%	13%	11%	10%	9%	8%	8%
Maximum RIA	104	95	96	94	100	87	90	90	86	80	82
Minimum RIA	94	84	81	71	65	61	50	46	49	43	35
spread	10	10	15	23	35	26	40	44	37	37	47
Ratio	3.3	2.6	3.1	4.3	5.1	3.3	4.4	4.4	3.5	3.1	3.6
Ratio*spread	32	27	47	98	179	87	176	192	128	114	168

$\text{minRIA}(n))^2/n$, where n is the number of segments) perhaps balances out these two components - efficiency and spread - more desirably.

Therefore, plotting this product of the ratio times the spread there are three local

Figure 4 RIA Ratio×Spread for a Given Number of Segments



maximums **RIA(7)**, **RIA(10)**, and **RIA(13)** (see figure 4).

These three divisions potentially provide the most suitable candidates from which to draw the best characterization of the text. **RIA(13)** will not be discussed further due to the rather low maximum and minimum values, (82 and 35 respectively) as compared to **RIA(7)** (100 and 65), and **RIA(10)** (90 and 46) (see table 3). **RIA(7)** will also not be discussed, due to the fact that its spread (35) is less than the spread of **RIA(10)** (44).

RIA(10), however, will be used for the remainder of the chapter as the basis of further discussion. It should be noted that although **RIA(10)** perhaps fleshes out the data the most desirably, by providing the highest rate of optimal features as defined above, it is neither the most accurate nor is it the sole source of important information concerning the lexical variation defined by this experiment.

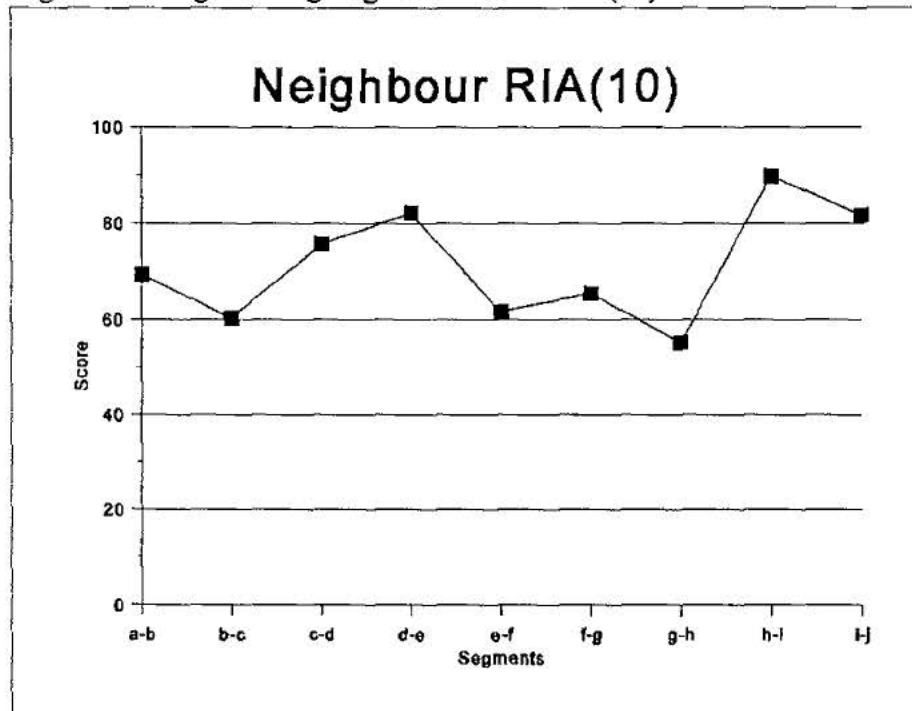
RIA(8), for example, appears to be an anomaly in a trend of maximal efficiency from **RIA(6) - RIA(11)** (see figure 4). There seems to be some intrinsic quality in this division of the text such that the otherwise clearly contrasting segments are muffled by a division by eight. Though this matter will not be pursued in detail here, perhaps several segments of **RIA(8)** spill over into several segments of low similarity, reducing the overall value of the similarity coefficients. Further study may reveal how, by investigating this spill-over effect, the understanding of the lexical divisions of the text may be attenuated.

4.3 Neighbouring Segments

A description of the similarity coefficients (**RIA**) for neighbouring segments might provide information as to the lexical similarity of the contiguous pieces of the text. Higher numbers between two neighbouring segments would indicate a higher degree of similarity between them, while lower numbers would indicate a lower degree of similarity. If the difference between the two neighbouring segments was 'large' this would indicate a large

change in the lexical status quo. This difference indicates the acceleration of the change in lexical similarity: either becoming more similar (i.e., moving to a higher score) or becoming more dissimilar (i.e., moving to a lower score).

Figure 5 Neighbouring Segments within RIA(10)



Comparing the change in lexical similarity of neighbouring segments (see figure 5) with the descriptions provided in table 4, reveals that there is one very large change in lexical similarity from section **g** to section **h** (35 RIA points). This large change indicates, due to the movement from a lower to a higher score, that after an interval of relatively consistent lexical dissimilarity [**efg**] with respect to its neighbours, there is an abrupt transition to an interval [**hij**] of a relatively consistent high degree of lexical similarity. Similarly the

Table 4 Description of Rates of Lexical Change Between Neighbouring Segments

Comparing Rates of Lexical Change Between Neighbouring Segments

RIA Rate Range	Description of Transition
40 - above	massive
30 - 39	very large
20 - 29	large
10 - 19	medium
5 - 9	small
1 - 4	tiny

interval. [**cde**] is relatively consistent with respect to the degree of lexical similarity, followed this time by a large transition to the interval [**fg**] which has a consistently lower degree of lexical similarity.

The transition to neighbouring segments of lexical similarity in the NeyYeh (as represented by its **RIA** score with 10 equal segments of the text) can be broadly characterised as follows: a relatively stable beginning of intermediate lexical similarity [**ab**] followed by a medium degree of abrupt transition to another relatively stable region of high similarity [**cde**]. This interval is in turn followed by a large degree of abruptness into a state of lower lexical similarity [**fg**]. This interval leads with a very large degree of abruptness to a final region of relatively high lexical similarity [**hij**].

4.3 The Iteration Process

A description of the lexical similarity of the individual segments of the text with respect to the entire text may also be undertaken using **RIA** scores. This analysis is based upon: i) finding basic pairs in the similarity matrix formed by calculating the **RIA(10)** scores for all the segments in the text; ii) amalgamating the segments which are basic pairs; and iii) recalculating the **RIA** scores based upon these new segments. The iteration process continues until the entire text is united under a single segment.

The rule for finding the basic pairs in a similarity matrix³ is to identify pairs of **RIA** values from two segments which are more like each other (that is, their values are higher) than they are like any other segment. The calculations of the similarity matrix and subsequent iterations for various arbitrary divisions of the text are included in appendix G. The computer program used to produce these calculations is included in appendix C.

Typically a dendogram is created from the data to illustrate the numerical distance between divisions. Using the iterative **RIA** process with this text produces results that do not render a non-punctuated dendogram always possible. The problem is that after amalgamating certain sections of the text, higher degrees of similarity are obtained amongst these new groupings hence making dendograms inappropriate. The choice has been made instead to create a legend based upon ranges of 5 **RIA** points with each

³Basic pairs are called "mutually most similar" pairs by Sneath and Sokal (1973, 219).

interval coded by colour. The range obtained represents an isopleth: sections of the NeyYeh whose lexical similarity is identical within this given range. This is much like an isotherm on a weather map connecting areas with the same average temperature. These isopleths for divisions other than **RIA(10)** are also included in appendix G.

Similarity Matrices for RIA(10)

Below is the iteration process for **RIA(10)** and the accompanying isopleths.

Table 5 RIA(10) Similarity Matrix - Round 1

f	a	b	c	d	e	f	g	h	i	j
a		69	65	74	73	58	71	58	72	75
b	69		60	60	58	58	63	54	58	69
c	65	60		76	68	63	64	63	63	76
d	74	60	76		82	72	76	69	63	69
e	73	58	68	82		62	58	73	55	69
f	58	58	63	72	62		65	59	58	59
g	71	63	64	76	58	65		55	46	64
h	56	54	63	69	73	59	55		90	70
i	72	58	63	63	55	58	46	90		82
j	75	69	76	69	69	59	64	70	82	
ave	68	61	66	71	65	61	62	66	65	70
med	71	60	64	72	68	59	64	63	63	69
			basic pair	d	e	82				
				h	i	90				

Table 6 RIA(10) Similarity Matrix - Round 2

2	a	b	c	de	f	g	hi	j
a		69	65	80	58	71	73	71
b	69		60	66	56	63	58	69
c	65	60		81	63	64	66	76
de	80	66	81		74	72	78	75
f	58	56	63	74		65	61	59
g	71	63	64	72	65		53	64
hi	73	56	66	79	81	53		82
j	75	69	76	75	59	64	82	
ave	70	63	68	75	62	65	67	71
med	71	63	65	75	61	64	66	71
		basic pair	c	de	81			
			hi	j	82			

Table 7 RIA(10) Similarity Matrix - Round 3

3	a	b	cde	f	g	hij
a		69	79	58	71	78
b	69		71	56	63	63
cde	79	71		78	73	92
f	58	56	76		65	65
g	71	63	73	65		62
hij	78	63	92	65	62	
ave	71	65	78	64	67	72
med	71	63	76	65	65	65
		basic pair	cde	hij	92	

Table 8 RIA(10) Similarity Matrix - Round 4

4	a	b	cdehij	f	g
a		69	84	58	71
b	69		72	56	63
cdehij	84	72		74	72
f	58	56	74		65
g	71	63	72	65	
ave	70	65	76	63	68
med	70	65	73	62	68
		basic pair	a	cdehij	64

Table 9 RIA(10) Similarity Matrix - Round 5

5	acdehij	b	f	g
acdehij		74	74	75
b	74		58	63
f	74	58		65
g	75	63	65	
ave	74	64	65	68
med	74	63	65	65
	basic pair	acdehij	g	75

Table 10 RIA(10) Similarity Matrix - Round 6

6	acdehijg	b	f
acdehijg		74	75
b	74		58
f	75	58	
ave	75	65	66
med	75	65	66
	basic pair	acdehijg	f
			75

Table 11 RIA(10) Similarity Matrix - Round 7

7	acdehijgf	b
acdehijgf		73
b	73	
	basic pair	acdehijgf
		b
		73

Isolexes for RIA(10)

Table 14 RIA(10) Isolexes - Round 2

2	a	b	c	de	f	g	hi	j
a	White	Dark	Dark	Dark	Dark	Dark	Dark	Dark
b	Dark	White	Dark	Dark	Dark	Dark	Dark	Dark
c	Dark	Dark	White	Dark	Dark	Dark	Dark	Dark
de	Dark	Dark	Dark	White	Dark	Dark	Dark	Dark
f	Dark	Dark	Dark	Dark	White	Dark	Dark	Dark
g	Dark	Dark	Dark	Dark	Dark	White	Dark	Dark
hi	Dark	Dark	Dark	Dark	Dark	Dark	White	Dark
j	Dark	Dark	Dark	Dark	Dark	Dark	Dark	White

Table 15 RIA(10) Isolexes - Round 3

3	a	b	cde	f	g	hij
a	White	Dark	Dark	Dark	Dark	Dark
b	Dark	White	Dark	Dark	Dark	Dark
cde	Dark	Dark	White	Dark	Dark	Dark
f	Dark	Dark	Dark	White	Dark	Dark
g	Dark	Dark	Dark	Dark	White	Dark
hij	Dark	Dark	Dark	Dark	Dark	White

Table 16 RIA(10) Isolexes - Round 4

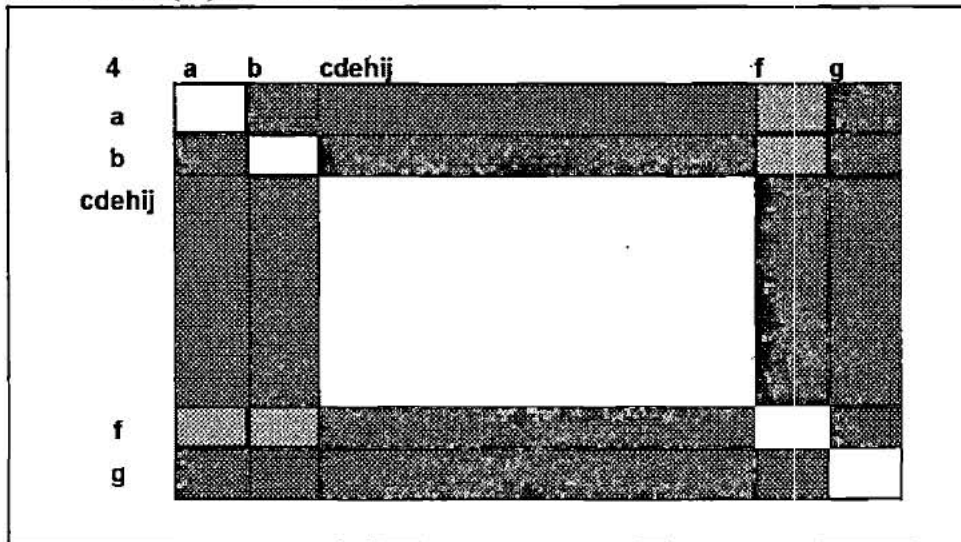
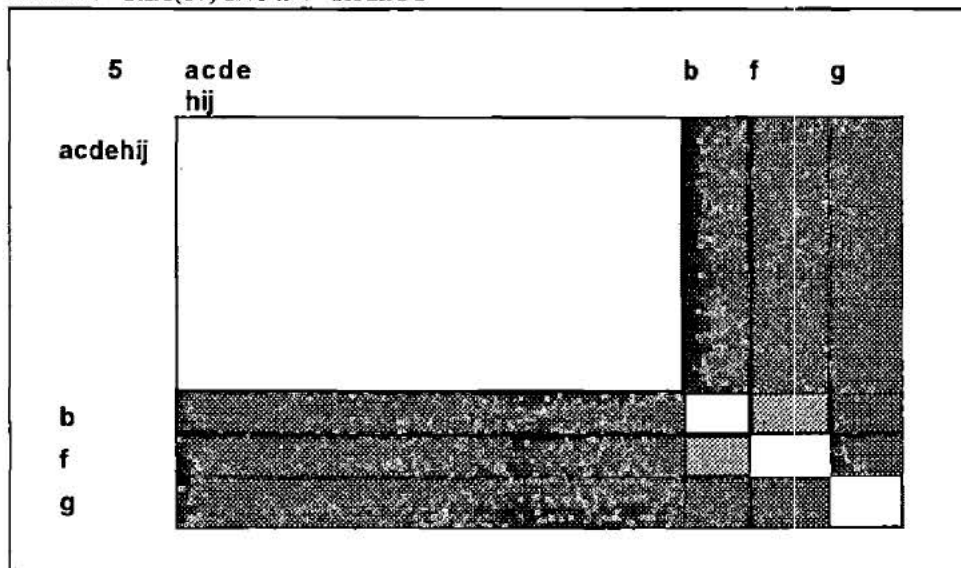


Table 17 RIA(10) Isolexes - Round 5



4.4 Partitioning the Text

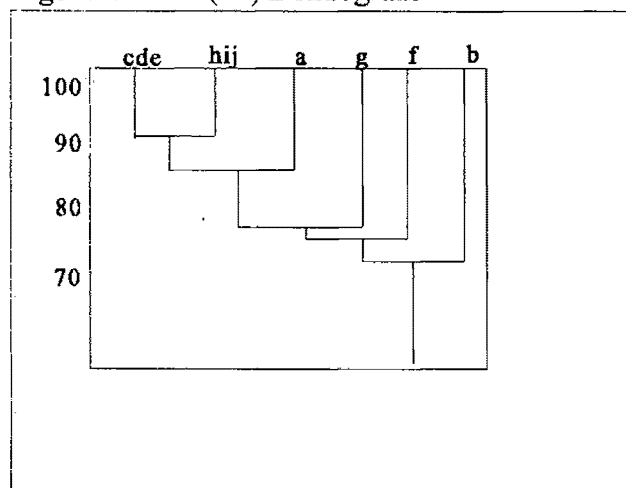
After two iterations of RIA(10) the similarity matrix reveals a distribution of the segments

of the text which is contiguous: both **{cde}** and **{hij}** are grouped as single clusters (see isolex in table 13). This is in contrast to the case, for example, where discontinuous segments could be joined together to form a cluster (i.e. **{aj}**).

The net result is a division of the text into six lexically distinct regions **{a}**, **{b}**, **{cde}**, **{f}**, **{g}** and **{hij}**. Furthermore no subsequent iterations of the similarity matrix produce basic pairs which have higher scores than those of the current iteration making a dendrogram and thus hierarchical representation possible (see figure 6).

RIA(10) Dendrogram

Figure 6 RIA(10) Dendrogram



From the dendrogram (figure 6) and the Neighbour RIA(10) graph (figure 5) a picture of the lexical similarity begins to emerge. Namely, there is a core of high lexical similarity of segments **{cde}** and **{hij}** constituting 60% of the text. Another 30% of the text, made

up of the segments {b}, {f}, {g}, is lexically dissimilar. Not only are segments {b}, {f}, and {g} dissimilar to the core segments they are dissimilar to each other. The final 10% of the text, segment {a}, appears to be intermediately dissimilar from the core and from the remaining 30%, with perhaps a higher degree of similarity to the core.

An implication of this description of lexical similarity within the NeyYeh is that if one were going to look for large intrusions in the original text, that is, if one wanted to explore the possibility that the NeyYeh was a collection of smaller texts compiled at some point in the past and the assumption was that the intrusions would manifest themselves as lexically distinct entities, the data as described above would suggest that segments {b}, {f} and {g} might be good candidates for intrusions. While this implication will not be pursued in this thesis, the hypothesis is, however, a legitimate point of departure for further research.

This chapter has attempted to lay a foundation for future study of the NeyYeh by providing a provisional structured inventory of lexical change within the text. No claim is being made that this inventory is significant with respect to the meaning of the text, although the results do suggest that further research may produce a stronger relationship between the structural inventory and the semantic content. To this end, Chapter 5 will outline certain semantic features of the text through the translation process. The translation will also indicate which lines of the text are in each of the six distinct lexical

regions described in this chapter. Commentary provided on the translation will also describe some of the difficulties in assessing the semantic content of the text as well as discussing approaches to specific textual problems.

5.1 Remarks

The translation provided in this chapter continues the focus of the thesis on describing the visible features of the NeyYeh. It is an attempt to begin to bridge the visible characteristics of the text with the potential range of meaning within the text. To this end, the reader will notice a number of distinguishing characteristics about the translation provided in this chapter. The format of the translation is as follows: i) line number, ii) the translation of the line, iii) observations about the text, and iv) segment identifier. The observations take the form of: identifying important formal qualities of the text, relating features found in the line to other parts of the text, questions concerning problems in understanding the line, or important comments and emendations by other scholars. The segment identifiers are those segments of the text described as distinct¹ by the **RIA** process in Chapter 4.

In this attempt to describe the potential range of meaning within the text I am in a sense reading as much out of the text as I can. The primary assumption in this translation is that the NeyYeh encompasses a belief statement grounded in a well-defined (to the author) cosmology - though the exact nature of the belief statement is unknown to me. This

¹It should be noted that the bulk of the translation work was done before the final RIA calculations were run. I had no knowledge of what the results of the RIA would be and hence no knowledge of the segment a particular line would fall into while I was working on the translation.

approach is similar in many ways to Graham's treatment of the *MohTzyy* (another text from approximately the same time period). In his preface Graham states: "it is time to stand back from the text and ask general questions about Mohist writings, not only about graphic and textual problems, but about the grammar, the technical vocabulary, the recurring stock examples, the overall organization of the parts, and answer as many of these preliminary questions as possible before committing ourselves to the interpretation of any one Canon" (1978, xii). While the methods used in this thesis differ considerably from Graham's methods (especially in examining overall organization) I am following his work in the approach he takes to translating the *MohTzyy*. This includes his belief that: "an analysis of the language is an indispensable tool for interpreting with confidence" (1978, xiii).

My desire to take the words seriously (both because of the assumption that the NeyYeh encompasses a belief statement and because the words themselves need to be analyzed) and to use a great deal of Graham's translations for individual words common to both texts, may have produced a translation overly concerned with the relationship of words as opposed to the celebration of the artistic form of the text or the place of the NeyYeh in the study of Pre-Hann cosmology. This emphasis on trying to maintain the exactness of the syntactic-semantic relationship of the words can make the reading of the text very awkward in places, yet I must reiterate that I have chosen to focus on the descriptive process not on an exegetical one.

This focus can provide new information about the NeyYeh as is indicated by some of the observations in the translation section. For example, the observations beginning at line 127 demonstrate that the text is (in places at least) more philosophically sophisticated and deserving of this word/grammar-intensive approach than has been customary.

On the other hand, a cautious approach has been adopted with respect to the semantic content of the translation. For example, I have identified certain words in this translation as technical terms. These are words that pose difficulty either due to their ambiguity or due to the confusion that arises from their use.

In the translation two categories of words are italicized: i) English words representing suspected technical terms, and ii) Chinese words representing fundamental concepts in Pre-Hann philosophy.

Some of these technical terms are so well known in Chinese literature that they were probably not 'technical' words to the original audience since the shift from their generally recognized meaning to their technical meaning is so slight as to be almost unnoticeable. Perhaps 天下 *TianShiah* 'the Under Heaven' and 萬物 *WannWuh* 'the Myriad Things' are such terms. Nonetheless, the purpose of this identification is not to measure the understanding of the terminology by the author and his intended audience but to characterize the technical use of words throughout the NeyYeh.

Furthermore a separation between understanding the range of meaning a word or phrase contains and the recognition that the word is used technically must be made. Some of the fundamental words of Pre-Hann philosophy - *Daw* 道 and *Chih* 氣 - are clearly such examples. These words are recognized as 'technical' yet no attempt is being made to define them precisely. It is not my intention to discuss the range of meaning of any of these words, in fact, some fundamental words are left untranslated (see table 18).

Table 18 Technical Terms Left Untranslated

Tzyh	GR	Initial Domain of Meaning
氣	Chih	Energy
道	Daw	the Way
德	Der	Potency, Virtue
精	Jing	Essence, Endosperm
心	Shin	the Mind/Heart

I have chosen not to translate some of these technical terms for two reasons. First these words are so heavily imbued with many different meanings, due to the fact that they represent generic concepts of entire belief systems, no other one word in English or Chinese, for that matter, would provide the same potential range of meaning.

The second reason is that the NeyYeh provides descriptions and definitions of some of these terms within the text itself, thus imbuing the words with their own specific technical sense. Leaving these terms untranslated provides an access to the technical variation within the sensibility from which the NeyYeh is working, without pre-judging the degree

to which the distinctions were made among these terms by the author. To translate these terms would not necessarily clarify any of their associations. Instead, it may keep them sufficiently vague and imprecise so as to allow the imposition of the coherency of the hermeneutical tradition at the expense of the coherency of the NeyYeh.

Identifying these terms, therefore, provides information which may contribute to consistency in the contextual background, in contrast to the lexical variation. This contrast could be used to provide a relative scale by which to measure the appropriateness of the choice of a consistent translation of technical terms throughout the text. The contrast between the boundaries identified by lexical variation and the consistency in context attained through the identification of technical terms will not, however, be discussed in this thesis but is mentioned as a point of departure for further research.

It is important to note that there is one technical term left untranslated which is not listed because it is not in the text; but it is ever present; that is, the term 'NeyYeh' itself. 内 *ney* [inside (Pulleyblank 1991, 223)] does occur in the text but the *tzyh* 業 *yeh*² does not occur and no reference is ever made to it. Given the range of possible interpretations for the phrase and the fact that it does not appear in the text, this rather mysterious title will go untranslated.

²Pulleyblank provides a range of meanings (diachronic and synchronic) for this *tzyh*: "horizontal board of a bell stand; initiate; work, trade, profession; course of study; property, inheritance; cause, enterprise" (1991, 364). Rickett translates the phrase NeyYeh as "Inner Life" (1965, 151). Roth translates it as "Inward Training" (1991, 609).

Without further qualifications, the translation and my comments are presented below. The translation, including the line numbers and segment identifiers, but without discussion is found in Appendix A.

5.2 Translation

1 In all cases the *Jing* of things

The first two lines form a belief statement, a manifesto, describing the way the universe is. Just as in the New and Old Testaments where truth is established in the context of Time, "In the beginning . . ." the NeyYeh establishes truth in the context of Space.

In these belief statements it is not required and even, in the sincerest sense, possible for the author to define any more precisely his terms: there is no context outside of the statement itself from which to draw upon to relate his terms to. John does not say: "by the beginning I mean 14 billion years ago" and the NeyYeh author does not say: "the *Jing* is such and such".

The author's belief statement may run like this: All things in the universe with the property of *Jing* are animated or have the potential to be animated.

Jing is a quality that, as we know it from its effects, has the ability to engender life. The reasoning used is deductive, since there is no way of telling whether an object is alive, without having had *Jing* as an element in its generation. This means that the uncreated, if such a concept exists in the mind of the author, cannot be known from knowing *Jing*.

Guo MohRuoh states: "In this work that which is called "the *Jing*", "the *Daw*", "the *Chih*" and "the *Ling Chih*" all are different names for *beentii* 本體 (Guo 1956, 781) 'noumenon; thing-in-itself' (Hann-Ing TsyDean 1985, 29).

{a}

2 Given this thing (the *Jing* possessed of things) thus they are made, thus they are born

There seem to be two main issues associated with this line in NeyYeh studies. The first is how one should treat 此 *tsyy*. The second concerns the consequent phrase 爲生 *wey/wei sheng*.

Issues concerning the emendation of *tsyy* will not be discussed since they fall outside the immediate scope of the description of the SBTK NeyYeh.

According to A. C. Graham (1978, 120) "*tsyy* is a near demonstrative, with the meaning of 'the thing

here' as opposed to 是 *shyh* also a near demonstrative meaning 'this said thing'. If we assume a comparable distinction within the SBTk NeyYeh, the "this" establishes the topic of the sentence as "the *Jing* possessed of things".

The consequent phrase can be read, it seems, using one of two main patterns. First taking *sheng* as the object of *wei*, we have: "Given this thing (the *Jing* possessed of things) then (the things themselves) become alive".

Second because of the manner in which *wei* and *sheng* are set in opposition to each other in the next couplet, their contrast recursively clarifies the syntactic understanding of this line. It seems, upon the first encounter, there is no confusion for the reader as to how to read the couplet and more specifically the function of *wei* - it is a transitive verb 'to make' taking *sheng* as its object. But upon encountering *wei* in the second couplet a certain uneasiness arises not because its grammatical function has changed but because the grammatical function of *sheng* has. *Sheng* has become in the second couplet a verb - its transitivity seen in the transformation of the *Jing*, which activates the five grains bringing to them not only what makes them what they are - alive - but also what makes them give life to others - the power of life.

The main objection to this second reading is that it is uncommon to have *wei* without an object. However, A. C. Graham (1978, 118) identifies six uses of *wei* without complement in the dialectical chapters of *MohTzyy*. What the syntactic criteria are for distinguishing *wei* from *wey* used by Graham is unclear, making his claim less tenable.

爲 appears 12 times in the SBTk NeyYeh (always with a complement).

{a}

3 Below it imbues the five grains with life

{a}

4 Above it creates the stars in their array

The rhyme of *sheng* and *shing*, belonging to the *Geng* rhyme group (Baxter 1992, 562) binds the material with the organic. The dissonance of having two words that on the one hand rhyme but on the other hand belong to different realms of creation mirrors the dissonance that is found in the universe: things are all at the same time separate yet connected.

{a}

5 When it flows amongst the realm of Heaven and Earth

This 於 *yu* seems to suggest either 'amongst' or 'within'. This may imply that there are other, unspecified, realms where the *Jing* may or may not inhabit or flow.

It is easy to see why this line would make some editors uncomfortable, the length of this line stands out - having six words whereas the lines locally are four words in length. The *ji jian* seems almost redundant and borders on being an afterthought.

The author begins with an entire set visualized in the imagination - the Cosmos - then bifurcates this space of presentation, filling each part of this bifurcation with the manifestation of the effect and power - the gestalt - of the *Jing*. At first the space is the Cosmos, the above and below. We are then drawn from the *Jing*, which we have yet to be told what it is, to the articulation of the effect, which it seems we do know as the imbuelement of life.

{a}

6 We call this *daemoniacally numinous*

This line could be read "demonic and numinous", as Roth (Roth 1991, 613) translates it but because of the parallelism of the form and the contrast of the content in the next couplet, I have chosen the adverbial use of *goei*.

{a}

7 When it *hides* within a man's chest

In what manner the manifestation of the *Jing* hides with the chest is not clear at this point.

The both the characters *tsarng* and *shiong* in this line are characters whose typographical form will change within this version of the text.

Graham in discussing *tsarng* in the *MohTzyy* defines it as to "hide away" . . . use of hibernation". He quotes among others the GoanTzyy (pian 52)"蜚虫不藏 'The insects do to hibernate do not hide away'" (1978, 419).

{a}

8 We call him a *Sagely Man*

{a}

9 For these reasons the people *Chih*

What exactly *Min Chih* means eludes me. It could be a technical term whereby *min* modifies *Chih*, something like 'the *Chih* of people' or it could be, though perhaps a little less likely, that *Chih* is a verb meaning 'to possess *Chih*' giving a rendering like: "the people *Chih* (are en-*Chih*-ed)". This is all very unlikely and most scholars emend *min*, following Ding ShyhHarn, to *tzyy* making it like line 18.

{a}

10 In its luminosity!

{a}

11 (the *Chih*) Is like ascending up to the Heavens

{a}

12 In its dimness!

The second use of the 指事字 *jyysyh zyh* (characters whose form indicate their explanation i.e., pictographs) 杲 *gao* (the sun rising above the trees) and 杳 *yao* (the sun sinking below the trees) emphasizes the strength of the statements being made. Both elements are in agreement: the phenomenon, the above and the below (the 上 *shang* and the 下 *shiah*) is contrasted with the radiant and the dark, in accord with the representation of the phenomenon by the two sets of *jyysyh zyh*.

{a}

13 (the *Chih*) Is like entering into the abyss

This series of similes has created an opposition between the noumenon and the phenomenon which enhances the extremeness in the value applied to all the major components in these images: the brightness is as bright as any brightness could possibly be within the realm of imagining. If, for example, you want brighter go a little higher and the *Chih* will still be brighter than that.

{a}

14 In its Vastness!

{a}

15 It is like being at sea

{a}

16 In its height!

{a}

17 It is like being on a barren mountain

This is reading 岷 *chii* for 已 *yii* (see Guo 1956, 782).

{a}

18 For these reasons these objects are en-*Chih*-ed

{a}

19 One cannot stop it by means of strength

{a}

20 Yet one can bring it to rest by means of *Der*

{a}

21 One cannot hail it by means of sound

{a}

22 Yet one can welcome it by means of *intention*

This is reading 意 *yih* for 音 *in* (see Guo 1956, 782). These two *tzyh* are confused several times, it seems, within this text e.g., lines 203 - 206 (see Guo).

{a}

23 *Respectful and Safeguarding*, do not lose it

The use of imperatives like *shoou jing* and *wuh* suggest a subtle transition from a belief statement to a somewhat more liturgical one.

{a}

24 This action is called "completing the process of *Der*"

The relation between this line and line 24 further suggests the teleological nature of the understanding of *Der* and the other fundamental precepts discussed in the text. What *Der* is is bounded by the sense that one has the power to obtain *Der*, how this power or understanding is obtained is unspecified and will be revealed when one achieves these higher states.

This technical term, *cherng*, seems to be a link between *Chih* and *Der*.

{a}

25 When *Der* is achieved the knowing will go forth

{a}

26 The *myriad things* will entirely be obtained

This is with the reading of *bih* instead of *guoo* (see Guo 1956, 782). 果得 *guoo der* could, however, be a technical term.

{a}

27 In all cases it is the *form* of the *Shin*

{a}

28 Self-fortifying/enriching, self-pervading

{a}

29 Self-engendering, self-completing

{a}

30 The means by which one loses it (the *form* of the *Shin*)

{a}

31 It is necessarily that one employs anxiety, joy

The cesura might not be at *leh* where I placed it.

{a}

32 Happiness, anger, desire, avarice

{a}

33 If one is able to expel anxiety, joy

{a}

34 Happiness, anger, desire, avarice

{a}

35 One's *Shin* may return to *the state of Deliverance*

This is reading 濟 as *jih* [to ferry, carry across; help across, save (Pulleyblank 1991, 142)] with the meaning of "help somebody in danger or difficulty; succour" (Hann-Ing Tsyrdan 1985, 367) as found in the *Jou Yih* 周易: "知周乎萬物，而道濟天下"(TY 1894).

{a}

36 It is the *nature* of the *Shin*

{a}

37 To enrich the state of rest/peace by means of *tranquility*

The difference between *ning* and *jing* appears to be a technical distinction.

{a}

38 Do not hinder it, do not disorder it

The object (it) is the *nature* of the *Shin*.

{a}

39 Be an accompaniment and thereupon be self-complete

{a}

40 Clear! Clear!

Following Ding ShyHam (Guo 1956, 782).

{b}

41 Like being right next to it

{b}

42 Elusively quick! Elusively quick!

{b}

43 Like being just about to grasp it but not catching it

This reiterates the sense of 'beyond knowledge' which is inherent in the noumenon.

{b}

44 Distant! Distant!

{b}

45 Like an extreme without an end point

This couplet reminds one of the discussions in *MohTzzy* especially the definition of 'limit'.

"窮，或有前不容尺也。（窮）。或不容尺，有窮。莫不容尺，無窮也。

C: The *chyong* (limit) is wherever at the next advance there is no room for a measured length.

E: If somewhere there is room for a measured length, it is limited; if everywhere there is room for a measured length, it is limitless" (Graham 1978, 294). For any student of the Calculus these are very astute observations.

{b}

46 As for this (the *form* of the *Shin*) to consult it one need not go to great lengths

{b}

47 Daily we employ its *Der*

{b}

48 It is the *Daw*

This is the first use of *Daw* in the text.

The use of *fwh* is interesting because it seems more a literary device - functioning more as punctuation - than a verbal device. The text to this point has had poetic qualities, rhyme and meter, suggesting that it was part of an oral tradition subsequently written down as opposed to a work created to be read.

{b}

49 That is the means by which the *form* is given substance

{b}

50 Yet one is unable *to keep it without changing it*

{b}

51 It goes but does not return

{b}

52 It comes but does not stay

{b}

53 Indistinct!

There are many opinions on the appropriateness of the character *mou* in the SBTk edition. Wang NiannSuen claims *mou* should be *jih*, and that *mou* is a copying error (Guo 1956, 783).

{b}

54 No one hears its sound

{b}

55 Gigantic!

Again there is a contentious list of potential variants.

{b}

56 And yet it resides in the *Shin*

{b}

57 Nebulous!

{b}

58 One cannot see its *form*

{b}

59 Soaking!

Jaw ShouJenq (1982, 81) sees 淫 *yn* as 侵淫 *chinyn* - a description of continuous enhancement. *Yn* also has overtones of sexual excess. Perhaps 'fecund' captures more of the active sense of the kind of life-giving forces involved. Nonetheless, the element of providing nurture seems also to be present. There is the sense that none of these forces have a known consciousness - an intentionality to them. Nurturing seems not to be unintentional.

{b}

60 In our midst and living together (with us)

The use of *yeu* and *jiu* make the line rather difficult to understand.

In the three previous stanzas *wenn*, *tzay*, *jiann* are all verbs; it is notable that *woo* is not.

{b}

61 One does not see its *form*

{b}

62 One does not hear its voice

{b}

63 Yet when we have made a classification of its teleology

More literally perhaps: "yet when we have laid out processes by which it becomes what it is called..."

{b}

64 We call that "the *Daw*"

We cannot deconstruct the *Daw* into anything other than its entirety - its manifestation. We only know it by its effect on things.

{b}

65 In all cases the *Daw* has no lodging

{b}

66 With a good *Shin* and calmly reposed

This is following the emendation of 愛 *ay* to 處 *chuu* (see Guo 1956, 784). Without emending *An Ay* 安愛 the meaning and structure of this line eludes me.

A. C. Graham (1978, 112) implies sometimes *an* is written for 焉 *ian* which is also the suggestion of Guo MohRuoh (Guo 1956, 784). See note on line 211.

{b}

67 When the *Shin* is made tranquil, and the *Chih* is *internalised and organised*

This is following Boltz's translation of 理 *Lii* as "'internal structure,' or 'internal system / fabric / order'" (Boltz 1986, 844). He further notes that *Lii* does not take on its other meaning of "Principle" until well after the Han.

{b}

68 Then the *Daw* can remain *fixed* (in the *Shin*)

Following Graham, *jyy*, fixed in the physical sense of remaining at rest.

It is the *Daw* that remains fixed, not the power of the *Daw* since the *Daw* cannot be deconstructed.

{b}

69 The *Daw* does not make itself distant

The implication is that it is not distant.

{b}

70 For the people obtain it (the *Daw*) in order to be productive

This productivity extends to everything one does, not only manufacturing but all our creations.

Again, it must be the *Daw* and not the power of the *Daw* that the people obtain.

{b}

71 The *Daw* does not make itself apart

{b}

72 For the people depend on it in order to know

Who are the *min* (people) and what is it that they do that gives them this seemingly unconscious access to the *Daw*?

The two premises of lines 69 and 71 allude to a third: since if the *Daw* is neither remote nor is it moving to that remoteness, and it is at hand, it therefore must ever be at hand.

{b}

73 For these reasons

{b}

74 Gigantic!

Sheu WeiYuh feels 卒 *tzwu* should be reduplicated (Guo 1956, 784).

Patterns of the type X 乎 *hu* and X X 乎 *hu* (where X is adjectival and X X is a reduplication) have occurred 13 times so far in the text. In the first four cases there is X 乎 *hu*; followed by three cases of X X 乎 *hu*; followed by 2 cases of X 乎 *hu*; then the current line is a case of X 乎 *hu* and the next couplet is a case of X X 乎 *hu*. therefore Sheu WeiYuh's assertion of a general pattern of consistency doesn't take into consideration the fact that the next occurrence might be a mistaken case of X 乎 *hu* as opposed to this line being a case of requiring an insertion of 卒 *tzwu* to make it an X X 乎 *hu* type.

Sheu's argument is based upon consistency and not upon actual facts. The problem of judging the merits of these kinds of arguments is that one may be unintentionally pulling the text towards a lower

level of complexity. As William Boltz points out, the assumption in textual studies (using common sense as one's guide) should be *difficilior lectio protior* 'the more difficult reading is preferred' (Boltz 1984, 201). I would call this Boltz's Second Law of Textual Thermal Dynamics, as it assumes all texts tend toward entropy.

The kinds of arguments put forward by Sheu may also have the effect of pulling the text towards some other text (usually the *ShyJing*), by assuming similar phrasing and rhyme structures in the better known text also belong in the other. In the case of the NeyYeh we also must be careful that we are not homogenizing the entire text since it is by no means clear that the NeyYeh is from a single source. This homogenizing process may obliterate important distinctions within the text.

{b}

75 It (the *Daw*) is like being able to bind it with a rope

This line is not clear to me.

{b}

76 Minute!

This is the second occurrence of *meau*, previously written with the water signific.

{b}

77 Like a speck that does not occupy space

Again this is like *MohTzyy*. See Comment on line 45.

{b}

78 As for the *characteristics* of the *Daw*

This is amending the text from 被 *bey* [cover; be covered by, suffer (Pulleyblank 1991, 31)] to 彼 *bii* [that, those; the other, another (Pulleyblank 1991, 33)] (see Guo 1956, 784). What the line could mean with *bey* is not clear to me.

{b}

79 How to give voice and acknowledge with sound?

Reading 惡 as *u* 'how' and 與 as *yeu* 'and' it might be that 音 *in* and 聲 *sheng* are being contrasted in the this line while 音 *in* in the next line should be replaced by 意 *yih*. Both these assumptions are highly speculative.

I am not very confident that I have translated this line correctly. Guo MohRuoh suggests *yih* for *in* in both this line and the next (1956, 784).

{b}

80 Cultivate the *Shin*, make tranquil the *Intentions*

See comments above in line 79.

{b}

81 The *Daw* thereupon can be *occupied*

This is following Graham's translation of 得 *der* "occupying the same spacial position" (1978, 556) in the *MohTzyy*.

{b}

82 What the *Daw* is

See note on line 125 for discussion of 也者 *yee jee*.

{cde}-c

83 Is that which by the mouth

{cde}-c

84 Is unable to be spoken

{cde}-c

85 Is that which by the eyes

{cde}-c

86 Is unable to be observed

{cde}-c

87 Is that which by the ears

{cde}-c

88 Is unable to be heard

{cde}-c

89 It (what the *Daw* is) is the means by which one cultivates the *Shin*

{cde}-c

90 And *assumes coincidence with the implicit standard* of the *form*

This is using Graham's translation of 正 *jenq* in the *MohTzyy* "assuming coincidence with an implicit standard" (1978, 170).

{cde}-c

91 It is that by which men

The grammar is tricky here and I am not sure I understand what is being said.

{cde}-c

92 Lose so that they die

{cde}-c

93 It is what is obtained so that they live

{cde}-c

94 It is that by which endeavours

{cde}-c

95 Lose so that they fail

{cde}-c

96 It is what is obtained so that they reach fruition

{cde}-c

97 In all cases the *Daw*

{cde}-c

98 Has no roots, has no stem

{cde}-c

99 Has no leaves, Has no flowers

{cde}-c

100 The *myriad things* are born by it

{cde}-c

101 The *myriad things* are brought to fruition by it

{cde}-c

102 We name it "the *Daw*"

{cde}-c

103 Heaven presides over the plumb

Lines 103-111 contrast the attributes of three different domains (the heavens, the earth and man).

The first attribute is the sphere of influence or governance. Reading these qualities as strictly material, that is, without the political and religious overtones which they possess, gives a rendering of 正, 平, 靜 as 'the plumb' (the vertical), 'the level' (the flat), and 'the stable' (the tranquil). The second attribute is the ordering device. Again, being somewhat simplistic, I provisionally read 時, 枝 (材), 謀 as 'timing' (the seasons), 'building' (the resources), and 'contrivances' (the plans).

{cde}-c

104 Earth presides over the level

{cde}-d

105 Man presides over the stable

The general consensus is that 安 *an* is an addition (see Guo 1956, 785).

{cde}-d

106 Spring, Fall, Winter, Summer

The seasons are listed not in order but in opposition.

{cde}-d

107 Are the *timing mechanisms* of Heaven

{cde}-d

108 Mountains, Hills, Rivers, Valleys

{cde}-d

109 Are the *building mechanisms* of the Earth

This line uses Wang NiannSuen's emendation of 枝 *jj* to 材 *tsair* (Guo 1956, 785).

{cde}-d

110 Happiness, Anger, Taking, Giving

{cde}-d

111 Are the *mechanisms of the contrivances* of man

{cde}-d

112 These said things are the reasons

{cde}-d

113 The *Sagely Man*

{cde}-d

114 With the course of time

{cde}-d

115 Is changed to (something) yet is not transformed (changed into)

I am using the Mohist distinctions of forms of change, e.g., 變 *biann* 'change to', 化 *huah* 'change into', 易 *yi* 'change for' (see Graham 1978, 214).

{cde}-d

116 In accordance with *things*

{cde}-d

117 *Changes his residence yet is not altered (by these changes)*

Most scholars would insert the missing *tzyh* 遷 *chian* [move, transfer (Pulleyblank 1991, 249)], which Graham translates in the *MohTzyy* as "to change residence" (1978, 568). Graham also has an interesting suggestion for 移 *yi* [move, transport (Pulleyblank 1991, 366)] that it may be the Mohist term for "definition" that is, the transferring of the name to the object in 'calling'. He cites the definition: "謂。移，舉，加。Wei (call). Transfer, refer, apply" (1978, 326). Given this sense of the word, it may be that the implication is that the Sagely man is unaffected by the things that he uses. This *yi* may be suggesting that the unaffectedness extends to the very notions of how we define what the man is.

I agree with Sheu WeiYuh that the couplets seem to be contrasting the various forms of "change" within a parallel prose construction (相對爲文 *shiangduey weiwen*) (Guo 1956, 786).

{cde}-d

118 If one is able to *assume coincidence with an implicit standard*

The subject is generalized to "If one" though the author might still be referring to the Sage.

{cde}-d

119 If one is able to be *serene*

{cde}-d

120 After this, one has the ability to *stabilize (hold things in alignment)*

There is an element of the awareness, both by the author who seems to understand the processes and by the sagacious man who is effortlessly following the steps to enlightenment, that this is the right path.

{cde}-d

121 If one hold one's *Shin* in *alignment* at the *centre*

{cde}-d

122 The perceptions of the eyes and ears will be free of distortions

The senses too will function under the implicit standard.

{cde}-d

123 The *four branches* (limbs) will be hard and firm

枝 *Jy* is contentious. Written with the flesh signific it is 'limbs'. Guo MohRuoh feels that the characters are in agreement, that is, an acceptable variant. Also *iy* is consistently written in the NeyYeh with the tree signific.

These couplets contrast senses (incoming stimuli) with those functions which reach out to the world - the limbs. Both the inward and the outward will attain the implicit standard when one's *Shin* is in alignment at the centre.

{cde}-d

124 One can make a residence for the *Jing*

{cde}-d

125 What *Jing* is

{cde}-d

126 Is a case of the *Jing* of *Chih*

{cde}-d

127 The motion of *Chih*

By being 'in motion', I mean the activity inherent in the verbs themselves. The use of *Jy nae* in the last four lines functions to create a chain of contingency that must be verbal. The action of each preceding verb passes to the next verb the activity inherent in it, either causally, temporally or necessarily.

We also must remember that we are constrained from knowing the *Daw* through the senses, as we have seen throughout the NeyYeh (Line 83: 口之所不能言也), but we are not constrained from sensing its teleology (Line 63: 序其成謂之道). At the very core of purposive activity is the activity itself. It seems contradictory to leave out the activity of the *Daw*, since that is all we perceive. With this activation we make the rest of the elements active - that is verbal.

{cde}-d

128 When the *Daw* is in motion then *life* is in motion

{cde}-d

129 When *life* is in motion then there is *thought* in motion

{cde}-d

130 When there is *thought* in motion then there is *intelligence* in motion

{cde}-d

131 When there is *intelligence* in motion (the motion of *Chih*) stays fixed in the *intelligence*

{cde}-d

132 In all cases it is the characteristic of the *Shin*

{cde}-d

133 When it exceeds the state of its *intelligence* then it depletes its *life force*

This line seems to be more of a warning than a laying down of the law.

{cde}-d

134 When there is a single object and capability of transformation

The relation between the object and the actor in this line is unclear. The uncertainty lies in the use of *ji* in the next line. It is unclear if the *ji* is describing the event as a whole or the person.

{cde}-d

135 We call this (transformation) *numinous*

{cde}-d

136 When there is a single event and the capability of alteration

{cde}-d

137 We call this (alteration) *wise*

{cde}-d

138 Transformation does not exchange *Chih*

{cde}-d

139 Alteration does not exchange wisdom

There is an association, by some sort of syllogistic process, of *Shen* (numinous) with *Chih*.

{cde}-d

140 Only *Holding onto the One*

Lines 140-147 are hard to make sense of. This difficulty is not alleviated by either the extra-metricity of the lines or the introduction of the concept of *JiunTzyy* (the Prince, the Worthy man, the Gentleman) found only in these seven lines of the text.

{cde}-d

141 The *JiunTzyy* is able to do this!

{cde}-d

142 *Holding onto the One* without letting go

{cde}-d

143 He can command the *Myriad Things*

{cde}-d

144 The *JiunTzyy* commands *Things*

{cde}-d

145 (and) Is not commanded by *Things*

{cde}-d

146 *Obtaining the Internalization and Organization of the One*

{cde}-d

147 When a *well-ordered Shin* resides at the *centre*

{cde}-d

148 When *well-ordered* speech emanates from the mouth

{cde}-d

149 When *well-ordered* affairs extend to persons

{cde}-d

150 This being so, then the *Under Heaven* will be *well-ordered*

{cde}-d

151 When the *One Statement* is attained

{cde}-d

152 The *Under Heaven* is compliant/devoted/submissive

{cde}-d

153 When the *One Statement* is established

{cde}-d

154 The *Under Heaven* is attentive/obedient

{cde}-d

155 This is what (this above remark) refers to

This is reading 此 *tsyy* for 公 *gong* (see Guo 1956, 786).

{cde}-d

156 When the *form* is not in *compliance with its implicit standard*

{cde}-d

157 The *Der* does not arrive

{cde}-d

158 When the *Centre* is not *tranquil*

{cde}-d

159 The *Shin* does not *achieve what is sought*

{cde}-d

160 When the *form* is *aligned*, the *Der* conserved

The text is not explicit on what it means to conserve *Der*.

{cde}-d

161 Heaven is benevolent, Earth is righteous

{cde}-d

162 Then a flood-like sensation will arrive of itself

{cde}-d

163 The extremeness of the *Numinous Illumination*

{cde}-d

164 How Brilliant! [It] knows the *Myriad Things*

{cde}-d

165 The *Safeguards* of the *Centre* of the *Righteous*, are not in error

{cde}-d

166 Do not with things disorder the senses

{cde}-e

167 Do not with the senses disorder the *Shin*

{cde}-e

168 This said thing is called "the *Centre Obtained*"

{cde}-e

169 As for the existing of the Noumenon [it] self-animates the body

This line is contentious (see Guo 1956, 787).

{cde}-e

170 [As for its] every coming and every going

{cde}-e

171 No one is able to *reflect* upon it

{cde}-e

172 Losing it implies disorder

{cde}-e

173 Obtaining it implies order

{cde}-e

174 Carefully clear out its dwelling place

It seems that 除 *chwu* can mean, in this context, either the sense of 'eliminate' or 'repair', much like the word *vet* - go through and separate the good from the bad.

{cde}-e

175 The *Jing* will thereafter *Arrive of itself*

{cde}-e

176 When the *Jing* is pondered, contemplate it

Both Dr Bryant and Endoo Tetsuo feel the grammar of the line may run Adverb + Verb + Verb It 精しく之を想思し、念を寧んじて之を治め、嚴容畏敬なれば、精將に至り定まらんとす。(Endoo 1992, 831).

{cde}-e

177 When *tranquility* is thought about, deconstruct it

There seems to be a clear distinction between various forms of mental activity i.e., *sy* is more specific and more structured than *sheang*, *niann*, etc.

Translating *jyh* as 'deconstruct' tries to capture the sense of the word which Graham translates "deal with successfully/put in order" (Graham 1978; 283) and what is defined in the Mohist Canon as: "治，求得也。To *jyh* is to achieve what is sought" (Graham 1978; 283). It is the coming to an understanding by ordering, with all its predetermined assumptions, that both *jyh* and deconstruct have in common.

{cde}-e

178 With a solemn comportment, a fearful respect

{cde}-e

179 The *Jing* will thereafter *Affix of itself*

This takes Wang NiannSuen's (Guo 1956, 787) emendation of *tzyh* (self) for *jyh* (arrive) even though the SBTK text has *jyh*.

{cde}-e

180 Obtain it and do not release it

{cde}-e

181 Then the eyes and ears will not be carried away by excess

{cde}-e

182 The *Shin* has no other standard (to which it should match)

Twu is an interesting word to use here. Karlgren broadly defines the character to mean "map, drawing, table (Chouli); plan, consult for (Shi) . . . The graph is a drawing" (Karlgren 1966, 144). The character can also serve as an abbreviation for a script of prophecy (TY 1990, 581).

This part of the text states that the *Shin* has a singular standard. *Jenq* is an action by which one 'moves' the *Shin* to meet the standard of the Form. To include *tzay jong* in the next line means one of three things. *Jenq* may be a description only of the activity of 'moving' the *Shin*, without attaining the standard form; a doubtful conceit. The line could be redundant with respect to location - the only place one can *jenq Shin* is at the *centre*; this contradicts our assumptions about "taut truth". Finally, it may be that there are two statements: "Make the *Shin* coincident with an implicit standard. Reside

at the *Centre*". The '*Centre*' is, it seems, the point of contact where the *Shin* and the *Form* meet.

The existence and location *twu* is not discussed in the text. We do not have a construct, like Plato's, where the world of forms is discussed *a priori*. Yet we do have the allusion to an ontology where forms are separate from objects, since the object can be in a state where it is not aligned with the form.

{cde}-e

183 Make the *Shin* coincident with an *implicit standard*. Reside at the *Centre*

Taur HornqChing amends the line from *jenq* to *dinq* (see Guo 1956, 787).

{cde}-e

184 The *Myriad Things* obtain the *standard*

The distinction between *dwu* 'a measuring' and *twu* 'a standard' is very subtle. *Dwu* never appears without *twu* also appearing in the next couplet. See lines 318 and 346 for more discussion on the way in which these two words relate.

{cde}-e

185 The *Daw* fills the *Under Heaven*

{cde}-e

186 Everywhere residing with the *People*

{cde}-e

187 Yet the *People* are unable to make it (the *Daw*) intelligible

{cde}-e

188 In the understanding of the *One Statement*

There seem to be two problems associated with these three lines. The first is to characterize what is meant by *i yan* (the One Statement). The second is how one reads the *char/jih* contrast of lines 189 and 190. Jaw considers the *yi yan* to mean 'one word': "只要有一個字的了解，就能夠上通於天，下至於地 [One only has to have the understanding of a single word, then one can connect, above, to heaven; reach everywhere, below, on earth] (Jaw 1982, 84). Rickett (1965, 161) when discussing the use of the same phrase in lines 151 and 153 states: "Here we have a play on the words *I* meaning 'the Oneness' or 'Unity of Nature' and *i yan* meaning 'one word which can express it'."

I appeal to the use of technical terminology to highlight the problem but in no way has it been solved. *I yan* has appeared twice before. In both cases its application is the source of great power and ability: its effect is a change in the way heaven and earth work.

The question of whether to emend 察到際 *jih* (reach) raised by some (Jaw, Riegel, Rickett) is not

based on NeyYch evidence but is more a guess than an hypothesis. As a provisional rendering, I take *char* as 'investigate, examine', thus reading the text literally.

{cde}-e

189 Above investigate in the Heavens

{cde}-e

190 Below extend to the *limits* of the Earth

{cde}-e

191 Invasively filling the *Nine Regions*

Hucker (1985, 176) describes the term *Nine Regions* as being "... from high antiquity a reference to the 9 administrative areas into which the cultural hero Yü was believed to have divided the Chinese world".

In the SBTK text it appears that 蟠 *parn* is written with 米 *mii* instead of 采 *biann*.

{cde}-e

192 What the process is called which explains this

{cde}-e

193 Resides in the refuge of the *Shin*

Most (see Guo 1956, 788) would delete or emend *an*. The above is the literal translation.

{cde}-e

194 When my *Shin* achieves what is sought

This is a personal reference to *Shin* as opposed 'the *Shin*'.

{cde}-e

195 The sense organs thereupon achieve what is sought

{cde}-e

196 When my *Shin* is stabilized/secured/at rest

{cde}-e

197 The sense organs thereupon are stabilized/secured/at rest

{cde}-e

198 That which causes it to be ordered is the *Shin*

{cde}-e

199 That which causes it to be stabilized is the *Shin*

{cde}-e

200 The *Shin* thereby conceals the *Shin*

{cde}-e

201 As for the centre of the *Shin*, it furthermore has a *Shin* therein

Maa is a typo for *ian*, as previously discussed in Chapter 3. This line is the only clear occurrence of *ian* in the SBTk NeyYeh.

This line is willfully extra-metrical and seems to be doctrinal commentary - because it augments the nature of *Shin*. Yet it could also be the culminating line of a versé or song form.

{cde}-e

202 As for the *Shin* in the *Shin*

I am following Graham (1978, 122) in the use of *bii* as a far demonstrative, in that the *bii* is 'the other', the more distant physically and spiritually.

{cde}-e

203 The *intention* is that which precedes the *utterance*

Lines 203 -206 are very contentious (see Guo 1956, 788).

{cde}-e

204 To have the *utterance* then proceed to the *form*

For this line Guo cites: "音然形" (1956, 788) whereas the SBTk NeyYeh has "音然後形".

{f}

205 To have the *form* then proceed to the *name*

This is emending *yan* to *ming* (Guo 1956, 788)

{f}

206 To have the *name* then proceed to the *carrying out*

{f}

207 To have the *carrying out* then proceed to the *ordering*

{f}

208 Not *ordered* is necessarily *disordered*

{f}

209 Disorder leads to death

{f}

210 The *Jing* being preserved is self-engendering

This is similar to Graham's translation of these lines as: "The essence being preserved grows of itself; outwardly it then flowers" (1978, 224).

{f}

211 Its outward manifestations thereupon blossom

{f}

212 The internal manifestations are concealed

Is *Ney Tsarng* a technical term?

{f}

213 Creating thereby a well-spring

{f}

214 Flood-like it is harmonious, balanced /level

{f}

215 Creating thereby a *Chih* abyss

{f}

216 If the abyss does not dry up

{f}

217 The *four limbs* are thus strong/firm

{f}

218 If the well-spring is not exhausted/used up

{f}

219 The *Nine Orifices* consequently become conduits

Conduits for the Power?

{f}

220 Thereupon (one) is able to make *limits* on Heaven and Earth

{f}

221 And Cover the *Four Seas*

{f}

 222 [He who] in the *Centre* has no *Confused Intentions*

{f}

 223 On the *Outside* has no perverse/evil disasters

It is interesting that *jong* (centre) is contrasted with *way* (outside).

If *tzai* (disaster) is *tzai* isn't *shye tzai* (evil disaster) redundant?

The *tzai* phenomenon are *shye*. The *yih* are *huoh*; but the link *jong:way::yih:tzai* does not make sense if *tzai* is 'disaster' in the sense of a tornado whipping through a trailer park, but it does begin to make sense if *tzai* means something like 'large scale atmospheric phenomenon' like *meiyeu* (plum rains of June in Modern China). Since 'thoughts' can be *huoh* then it seems *tzai* must similarly have *shye* or not have *shye*. Therefore, either the grammar of the sentence must be rethought, or the poet has arbitrarily reset the strictness of the standards in the parallel couplet (the poet's prerogative), or *tzai* does not mean disaster in this instance.

{f}

 224 [Whose] *Shin* is *protected/made whole* at the centre

Chyuan seems to cover the potential meanings of 保全 (to protect) and 痊 (to heal) in that if the conditions of *chyuan* are met in the *Shin*, and with the *Form*, then the disasters of Heaven and Humanity do not make themselves present and we identify such a person as a Sage. It is this transcendent aspect with regard to the Sage that leads one to feel that this process is protective and curative.

Chyuan, as a technical term, is not defined in the text. 'Protect/make whole' is used to cover the potential range of meanings.

{f}

 225 [Whose] *Form* is *protected/made whole* on the outside

刑 *shing* is now being written as 形 . See notes on variants in Chapter 3.

{f}

 226 [He who] does not *chance upon/encounter* natural disaster

The adjectival weight of negative feeling in 災 *tzai* has increased from its use in line 223. In its previous use it was modified by *shye* evil/perverse here it stands unmodified contrasted with calamity.

{f}

 227 [Nor] Does not *meet unexpectedly/encounter* human calamity

{f}

228 We call this (kind of person) a *Sagely Man*

Line 228 is a repetition of line 8.

{f}

229 When one can be *coincident with an implicit standard* and be *serene*

This particular reading has been chosen for two reasons: the first is that *Jinq* is a state not a form, therefore, cannot be made coincident. Second, all the elements in the next two lines are pairings of objects with like objects or attributes with like attributes and this patterning seems conducive to this kind of reading.

{f}

230 The skin's complexion is compliant and relaxed

There is a typographical error in Guo MohRuoh's comment on this line: “寬”字失韻，疑本作“廣”，涉《注》而誤。廣與明(sic 靜)，強，方，明爲韻。(Guo MohRuoh 1955: 789).

This line is a clear link between the metaphysical realm and its positive effects on the body.

Yuh kuan seems like a technical term. I could not find any reference, in the standard source materials (TY, TH, LYT, GYTD) where it is used to describe skin.

{f}

231 The perceptions of the eyes and ears will be free of distortions

Line 231 is a repetition of line 122.

{f}

232 The muscles are trustworthy and the bones are strong

SBTK has 筋 *jin* (muscle) written with the grass signfic (140) instead of the bamboo signfic (118). Karlgren's entry (k445b) for this character is odd; there is no character listed for the index number 445a. Under 445b he states "The modern graph has 'bamboo', 'flesh' and 'strength'. (Karlgren: 1966, 237). Checking an etymological dictionary (Jang: 1968, 599) it quotes the *ShuoWen JieTzyh*: “肉之力也。從力，從肉，從竹，竹之多筋者” there is no mention of another form of this character.

Morohashi (1968, vol 9 662) does have the character with the grass radical. It is found in the *PianHae*, a Jin dynasty (1115- 1234) collection of: variant characters, rare characters, and often-confused characters (TY 2365). The *PianHae* states that this character, pronounced the same as 斤 *jin*, means bone.

{f}

233 Thereupon be able to be crowned with the *Great Circle*

This use of *nae* is in some sense extra-metrical either enclitic or added as clarification. It neither belongs to the syntactic symmetry of the preceding nor following lines. Its use is, however, identical to line 220 - including the verb *neng*. Riegel (1978, 161-162) has deleted both occurrences and placed the lines in different stanzas. This appears to be an example where distinctive features are ignored (removed in this case) thus inducing a process of homogenisation upon the text.

The next four lines contain a series of what appear to be technical terms: *Great Circle*, *Great Square*, *Great Clarity*, *Great Brightness*. There is an assumption in the standard gloss on these lines which is that each of the terms stands for something known (e.g. Heaven, Earth, the Sun and Moon, Ocean) yet the occurrences themselves are the sources for this assumption (TY 666-673). These terms appear nowhere else in the text.

{f}

234 And pace out the *Great Square*

{f}

235 More reflective than the *Great Clarity*

The mirror-like qualities of still, clear water?

{f}

236 More visible than the *Great Brightness*

The combined light of the Sun and Moon (TY 666).

{f}

237 Respectfully conscientious, that nothing is in error

{f}

238 Daily renew his *Der*

{f}

239 In all aspects and locations knowing the *Under Heaven*

Biann as everywhere, metaphorically and physically.

{f}

240 Extending beyond the *Cardinal Points*

Syh Jyi is a term for the four cardinal directions (TY 562).

{f}

241 Respectfully disseminating its substance

{f}

242 This process is called: *the internal being occupied*

{f}

243 This being so (he does) not return (to a former state)

This couplet is a bit of *non sequitur* since the conclusion does not immediately follow from what has gone before, yet liturgical links, if this is what it is, are not bound to the sequence of tautology.

{g}

244 This said thing would be an error

Is the "this" the attempting to turn back? Is *fy* an adjunct?
Guo "之"乃"亡"(無)字之誤 (1956, 789).

{g}

245 In all cases the *Daw*

{g}

246 Is necessarily tight, is necessarily close

The attributes of *Daw* in these three lines are a pairing of near synonyms - perhaps stock phrases - *kuan shu* appears in line 365, *jian guh* in line 123. *Jou* is a singularity and therefore the assumption is that of all its potential meanings it takes on the one closest to *mih*. That is, *shih mih* (tightly woven, close) (TY 505).

{g}

247 Is necessarily broad, is necessarily expansive

{g}

248 Is necessarily hard, is necessarily firm

{g}

249 *Safeguard the Good* do not release it

Understanding the use of *shee/sheh* in the text is very difficult. The use seems inconsistent.

52 其來不舍
124 可以為精舍
174 敬除其舍

180 得之而勿捨
 249 守善勿舍
 298 思之而不捨
 301 生將異舍
 344 精之所舍

For example in line 52 "It comes but does not stay" it is an intransitive verb pronounced *sheh* in Mandarin. Line 124 "One can make the *Jing* reside/ a residence for the *Jing*" is again consistent with the intransitive/nominal definition of *sheh*. Line 174 is nominal "Treat appropriately and vet their/its dwelling place" and pronounced *sheh*. The same is true for line 301 "Life thereafter relinquishes the residence". In line 180 "Occupy/obtain it and do not release it", *shee* is the transitive verb to "release, set aside, abandon" (Pulleyblank 1991, 278). Both Pulleyblank and TY (1280) claim that 捨 *shee* is a specific form of the range of usage associated with 舍 and that 舍 is sometimes used to denote 捨, where it is pronounced *shee*. Thus the character *shee* seems fairly stable in its range of meanings. In line 249 the use of *wuh* indicates that 舍 is a transitive verb whose object is generalised and therefore must be of the same form as 捨, giving the translation: "Guard 'the Good' do not release it". Line 298 is a passive construction "Contemplate it yet it is not released". Line 344 is still under consideration.

One can speculate that there are only four reasonable explanations for the inconsistent use in line 249. First, that the use of varying forms of a character was not 'fixed' until later times and that this is perfectly allowable for the given time frame of the text. Second, that it is the result of a copyist's error. Third, that the text consists of a compilation of smaller works which come from different sources representing different typographical styles. Fourth, I have read the lines incorrectly and there is no contradiction. None of the evidence present is conclusive, but since this is the second piece of independent evidence pointing to the possibility of a compilation, the value of this explanation as an hypothesis is gaining credibility.

It is also important that the clear distinctions both in part of speech and in form, so close together in lines 298 and 301, indicate that rules are being applied in one area of the text and are not in another.

{g}

250 Drive away the excessive, abandon the superficial

This line is contentious. The general feeling (Guo 1956, 789) is that 澤 *tzer* is not correct. Some suggest it should be 釋 *shyh* resulting in the reading "abandon the superficial". I have no better alternative ("favour the sparse"?).

{g}

251 When one knows its extent

{g}

252 He returns to the *Daw* and *Der*

Could also be read, it seems, as 'the *Der* of the *Daw*' and 'is en-*Der*-ed by the *Daw*'.

{g}

253 The *Shin* made whole/protected resides at the centre.

This is the third and final sentence of the type: X *Shin tzay jong* (121, 183, 253) *ding, jenq, chyuan*.

{g}

254 This can neither be concealed nor hidden

{g}

255 It is made known in the appearance of the *form*

Liu Ji and Wang NiannSuen amend 和 *her* to 知 *jy* (Guo 1956, 790).

{g}

256 It is made visible in the colour of the skin

{g}

257 The Good *Chih* seeks out men

{g}

258 With more affection than a brother to his brother

{g}

259 The Evil *Chih* seeks out men

The parallelism with line 257 would suggest that the otherwise ambiguous character 惡 is *eh*.

{g}

260 With more animosity than swords against sabres

{g}

261 One does not say this sound

之 *jy* is used as adjunct. "With one near demonstrative [此] a distinction is made between independent pronoun and the pronoun as adjunct.... The corresponding pronoun used as adjunct is 之. A39 之 — 'this one thing'" (Graham 1978, 122).

{g}

262 More dreaded than the roar of thunder

{g}

 263 The *form* of the *Shin Chih*

Reading the line parallel to 261, it seems that *Chih* might be a verb: "The *Shin en-Chih's* this form". The *iy* is again by parallelism an adjunct; 'its form' would be 其形.

 {g}

264 (Is) Brighter than the Sun and Moon

 {g}

265 More recognizable than one's father and mother

The 辭源 gives as definition for the following: "昭著，明顯。《禮，中庸》·《詩》云：「鳶飛戾天，魚躍于淵」言其上下察也。 This explanation seems the most suitable, for *char.* given the above line.

 {g}

266 The rewards are not sufficient to encourage good

 {g}

267 The punishments are not sufficient to deter transgression

The relationship between *guoh* and *shann* seems more behavioral than moral; 'bad' is doing wrong, not just a state of being.

Shyng in this instance because of its contrast with *shaang* means 'punishment' not 'form'. Since the use of *shyng* with the knife signfic only appears twice in the text and in line 27 it is used to represent 'form' its use in that line must be a singular anomaly.

 {g}

 268 (Provided that) The *Chih's intention* is attained

 {g}

269 The Under Heaven is submissive

This line is a repetition of line 152.

The structure of 268-271 is identical to that of 151-154.

 {g}

 270 When the *Shin's intention* is fixed

 {g}

271 The Under Heaven is attentive

{g}

272 Capture the *Chih* as one does a (daemon/Noumen)

Lines 272, 274, 290 in the SBTk text all have the character 搏 *bor* "beat, strike; grasp, seize" (Pulleyblank 1991, 41). But the general consensus amongst the scholars quoted by Guo is that *bor* is a corruption of 專 (1956, 790). The arguments given deal with issues outside of this text.

Bor appears only three times within the text: once modifying *Chih*, once as an intransitive verb (274), and once modifying *Shin*. In each case *bor* is closely connected with the verb — *i* 'to unify' and in each case a higher order of power is achieved: 萬物備存 (273) 耳目不淫 (291). Therefore, the possibility that *bor* is a technical term describing some activity of incorporation should remain open.

{g}

273 Then the *Myriad Things* become resplendently constructed

{g}

274 To have the power to *Capture!*

See note 272 for *bor*.

Rickett views the next series of lines ending in *hu* as questions. If he is correct in his reading, then there has been a shift in the intended audience from the general to the personal.

{g}

275 To have the power to *Unify!*

{g}

276 To be able without cracked bones or stalks

This is a reference to two forms of divination.

{g}

277 To know the auspicious from the ill omened

{g}

278 To have the power to *Affix*

Graham states: "In logical contexts both 止 *jyy* and 行 *shyng* are used technically. Intransitive *jyy* (defined in A 50) is used of a name staying in objects throughout their duration and being confined to them, as in A 78 是名也止於是實也 "This name stays confined to this object". The verb can stand alone without a directive: A 43 俱止 "It stays fixed of all": A 93 員止也 "The circle stays fixed. . ." (1978, 177).

Clearly, *jyy* is a technical term in the NeyYeh. Though *jyy* does not appear to have the philosophic implication of 'names staying with objects' here, it is a description of some metaphysical or cognitive activity.

{g}

279 To have the power to *Accomplish*

{g}

280 To be able not to seek it out from all the experts

Harbsmeier feels that 諸 *ju* refers "to the members of a well defined set" (1981, 167).

"The main point that I want to illustrate briefly in this section is that the apparent 'adjectival quantifiers' 諸 *ju* 'all', 群 *chiun* 'hosts of' and 衆 *jong* 'crowds of' have one crucial thing in common: they are used in AC to articulate something one might be tempted to call definite quantification. Semantically they incorporate something like a definite article" (Harbsmeier 1981, 166).

As an example of the specific quantification conveyed by *ju* Harbsmeier takes : 諸君子皆與驩言 (Menq 4B27) 'All the gentlemen have spoken to me' *Never*: 'All gentlemen have spoken to me' 169

{g}

281 Yet obtain this accomplishment

{g}

282 *Contemplate it. Contemplate it.*

{g}

283 Try again *Contemplate it*

"When a sentence has an explicit topic 亦 *yih* always refers to that topic (i.e., has it as its scope) and 又 never does. (Except in special cases...) 又曰 always means something along the lines of 'went on to say', never 'said so too' " (Harbsmeier 1981, 137).

{hij}-h

284 *Contemplate it, yet it is not penetrated*

Tong appears four times in the NeyYeh (219, 284, 285, 352). Its use in these two lines and in 352, because of the inherent verbal activity, is closely associated with *Chih* and it should be classed as a technical term. It is not just, as Rickett suggests, something that is 'comprehended' (1966, 165).

Tong is 'a going over to the other side' both physically, intellectually and spiritually.

{hij}-h

285 When the *daemoniacally numinous penetrates it*

The way the sentence is structured I want to translate *jiang* something like 'apparently' or 'seemingly'. I read this section as "If the DN adverbially *penetrates* it it is not the strength of the DN it is the 'extensibility' of the JC". *Jiang* seems to be imbuing the verb with a mood expressing a future indicative: "When you go shopping tomorrow..." yet there is a hint of counterfactual in the line - probably left over from the previous lines where the poor guy has been trying and trying but can't get through to the other side.

{hij}-h

286 It is not the strength of the *daemoniacally numinous*

{hij}-h

287 It is the *extensibility* of the *Jing-Chih*

There are two important features of this line that require comment; the adjectival use of *jyi* and the coordination between *jing* and *chih*.

45	如窮無極
163	神明之極
190	下極於地
240	窮於四極
251	既知其極
287	精氣之極也

Jyi is used here to describe the quality of *Jing + Chih* by which they make possible the *penetration* discussed in line 282-286. Throughout the NeyYeh *jyi* is roughly translatable to 'extreme' - 'the outermost'. Lines 45, 240 clearly are examples of this type of usage. The problem becomes difficult when the NeyYeh uses 'outermost' as a quality- a process which is a distinctive characteristic of the set of larger qualities being discussed. *Jyi* in this sense does not mean "arriving at the limit or extent" (TY 1593.3) it means "the ability to go beyond that limit." The 'limit' is the limit of the one setting the standard not the one - the *Jing+Chih* in this case- who is able to surpass it. This methodology of thinking about continuous systems (either open-ended or closed) is a universal approach to describing a context from which all necessary agents in the system can be viewed: whether theological, like Anselm of Canterbury's existence of a "something-than-which-a-greater-cannot-be-thought" (Hyman and Walsh 1980, 162); mathematical, like the Calculus of Isaac Newton; or scientific like the definition of limit in *MohTzyy*: "窮，或有前不容尺也。 The *chyong* (limit) is wherever at the next advance there is no room for a measured length." (Graham 1978, 294). The adjectival use of *jyi* in line 287 is a recognition of this methodology.

There are two possibilities to describe the relationship between *Jing* and *Chih* in this line. Either they are a coordinate pair "*Jing* and *Chih*" or *jing* modifies *Chih* "the *Jing*-type *Chih*". Crucial in attempting to re-establish the orthodoxy of the NeyYeh is the ability to state the ontological distinctions between *Jing* and *Chih*. Are *Jing* and *Chih* separate components or does one proceed from another. Is this evident in the text? When we see contradictions in texts are they in fact contradictions or are they distinctions and refinements in the belief structure underlying the NeyYeh? How are these issues to be addressed? To provide a methodological framework we must first establish how we are to trust the integrity of the NeyYeh: not just from the point of view of the textual transmission - are we receiving what was written down - but we must also question whether

what was written down was intended to be used the way we are using it. If someone 2500 years from now found a copy of Handel's Messiah, its theology is more unified, and thus what one can describe of the belief system that underlies it is somehow more accurate and unified, than if the same person found a sheet of Christmas carols with songs on it ranging from *O holy night*, *Santa Claus is coming to town*, *O little town of Bethlehem*, and *I'm dreaming of a white Christmas* the unity of which is at a much different level.

Intentionality is the hobgoblin of hermeneutics and we should clearly separate our intent from the author's. But if we can find clues in the text, as to how the text was used and what the text is, we can begin to describe its import to Pre-Hann thought and belief. If the text is, as I suspect it is, a compilation of smaller pieces, then to try to extract some sort of belief structure from it is at best extremely risky (and whose conclusions would be very vague) and at worst an exercise in bad scholarship (whose conclusions would not provide a solid foundation for future work).

One cannot commit the text to be definitively one thing or the other with respect to the relation of *Jing* and *Chih*. For the time being I will use the hyphen to denote this undetermined relationship.

{hij}-h

288 When the *Four Contours* have been made *coincident with the implicit standard*

Four Contours is a term for the four limbs (TY 564) which is most likely a metonymical term for the body.

{hij}-h

289 When the *Blood-Chih* has been made *tranquil*

See note 287 on coordinate/modifying *Chih*.

{hij}-h

290 *Unify the Intentions, Capture the Shin*

See note 272.

{hij}-h

291 The eyes and ears are not vitiated

{hij}-h

292 Although distant it seems near

{hij}-h

293 *Contemplating and exploring engender wisdom*

{hij}-h

294 Tardiness and vacillation engender anxiety

{hij}-h

295 Violence and arrogance engender resentment

{hij}-h

296 Anxiety and depression engender illness

{hij}-h

297 With illness there are complications and then death

{hij}-h

298 *Contemplate* it do not let it be released

See note 249 for discussion of *shee*.

{hij}-h

299 On the inside complications, on the outside emaciation

{hij}-h

300 If a *standard* (to which it should match) is not made near the outset

蚤 *tiao* [flea: early (Pulleyblank 1991, 392)] written for 早 *tiao* [early; morning (Pulleyblank 1991, 392)] may be an important clue to textual provenance since the first character is rare compared to the second. Thus if one knows something about the history of the use of the first character to mean the second - was it a taboo word? - is it a regional variation? - did its use go out of style after a certain point in time? - one may be able to apply this knowledge to the NeyYeh.

See note 182 for discussion of *twu*.

{hij}-h

301 Life thereafter relinquishes the residence

In Jaw's note on this line he takes 巽 *shiunn* to be a homophone of 遜 *shiunn* (yield, depart) (1982, 82).

See note 249 for a discussion of *sheh*.

It is important to note that the author did not say "Life gives up *its* residence (i.e., the body)". Line 301 gives more of a sense of 'life' being a common force permeating transitory forms, as opposed to 'life' being a force residing independently in a multitude of forms.

{hij}-h

302 When eating there is nothing comparable to not being satiated

"若 *ruoh* provides a striking example of disputation imposing a consistent use of words regardless of accidents of idiom. In ordinary Pre-Hann usage *ruoh* is negatable only when degree is implied..." (Graham 1978, 137) This quote is germane for two reasons. First it concurs with my premise that consistency can be more important to a philosopher than correct use of language. Second that the above line, and lines 303, 329, 330, 331, 332, 333 which all have *moh ruoh*, imply degree.

Jaw translates the Old Chinese phrase 莫若 as 最好 (it's best to) in Modern Chinese (1981, 86). While I think that he is correct to do this, he over-simplifies the lines by using the same verb form (不要) for both 無 and 勿.

{hij}-h

303 When *contemplating* there is nothing comparable to not causing it to arrive

Again Jaw: 最好不要用儘 "it is best not to over-exert" (1981, 86) taking 至 *jyh* [arrive; utmost, most (Pulleyblank 1991, 407)] for 致 *jyh* [cause to arrive, bring; send (Pulleyblank 1991, 408)]

The awkwardness in my translation is the result of trying to preserve each constituent part of what is there and trying not to pave over the rough edges. The sense of these two lines seems to be "It is better, when eating, not to eat until you are full \ It is better, when contemplating, not to contemplate until you 'get it'". But such a translation loses what could be the neg raising (see Harbsmeier's example neg raising in the phrase "I don't think that will do" when we mean "I think that won't do" (1981, 31)) and also the description of what the activity of contemplating induces.

{hij}-h

304 Suitably regulate this mid-point

This mid-point being the point between fasting and gorging.

{hij}-h

305 It will thereafter be *Self Arriving*

The *bii* refers back to a previous topic. Jaw believes this topic to be *Sheng*, life-force, from line 301.

{hij}-h

306 In all cases the life-force of man

This is the first of 3 identical lines (306, 324, 369). Each of these lines is followed by a four line couplet. After the four line couplets, however, the verse forms become unique. It seems these lines are not the opening lines to an identical verse form, though they may well have been in previous forms of the text.

This line is the first occurrence of 凡 *farn* together with 也 *ye*. If the meaning of the sentence form is basically the same with or without the *ye* then this indicates a stylistic change in the text. This type of change can be contrasted with a lexical change where words are used only in certain parts of

the text. "The scope of *farn* is always the *whole* topic of the sentence at the beginning of which it occurs, never just the initial noun phrase of that topic" (Harbsmeier, 1981, 158). The function of *yee* in this line seems to suggest it is used as a topic marker; thus there is no basic difference from previous uses of *farn* within the text and it seems that this new form is, in fact, a stylistic change.

The noun phrase *ren jy sheng* is in this context a reference not to what we do when we are alive, our entrances and exits, but a reference to the *gestalt* of being alive - that it is that we are alive. In the next two lines the use of *chyi* refers not to the man (see Rickett 1966, 166) but to the *sheng*.

{hij}-h

307 The Heavens produce its *Jing*

{hij}-h

308 The Earth produces its Form

{hij}-h

309 Conflation of these is the means by which we are fashioned

This is using Guo's suggestion to place the cesura after *wei* (1956, 792).

{hij}-h

310 The man being correctly apportioned thereupon is born

The harmony seems to be the bringing together of Form and *jing* in appropriate proportion.

{hij}-h

311 If it is not correctly apportioned he is not born

{hij}-h

312 When examining the *Daw* of *correct apportionment*

{hij}-h

313 Its *Jing* is not seen

There is disagreement among the scholars cited by Guo (1956, 792) regarding the amending of *jing* to *chyng* [passion, feelings; circumstances (Pulleyblank 1991, 256)]. If *jing* is being used technically then we have: "the *jing* of the *Daw* (the Way) of *correct apportionment* is not seen" which is very convoluted but not necessarily incorrect. *Chyng* is a much easier word to make sense of in this context. "Its circumstances cannot be seen" (Rickett 1966, 166). The possibility remains that *jing* is used in its non-technical sense here - essential, giving : "the essential character of the *Daw* (the Way) of *correct apportionment* is not seen".

{hij}-h

314 Its distinguishing characteristics are not classed

This is following Jang PeyLuen (Guo 1956, 792).

{hij}-h

315 When the vertical and horizontal forces occupy the chest

The *pyng* and *jenq* could be references to the forces mentioned in lines 103 and 104. *Shann* could be a technical term here used to describe something one can do with the chest - either a breathing technique or some technique used to contain forces within the chest. Jaw feels that the meaning of the term is to *janjiuh* occupy; hold (1981, 82).

{hij}-h

316 Being blended appropriately in the *Shin*

This line is not very well understood.

{hij}-h

317 This (the resultant blended force) is the means to a Long Life

{hij}-h

318 When Happiness and Anger fail to stay within acceptable limits

I am following Ding ShyhHarn (see Guo 1956, 793) in replacing *shii* for *fenn* only for aesthetic reasons not because I am convinced that he is right.

The pattern X Y *ji shy duh \ nae wei jy twu* occurs again in line 346.

{hij}-h

319 Invoke this *Standard*:

{hij}-i

320 Regulate the *Five Appetites*

The five appetites are defined as: "耳，目，鼻，口，心的欲望" (The desires of the ears, eyes, nose, mouth, *shin*) (TY 137) also in Jaw (1981, 86). The example given in the TY is from the NeyYeh so there is the possibility of circularity.

This sentence seems like it is a sentence fragment. The genitive particle *chyi* seems to be referring to 'the body' or 'self' yet it is unspecified.

{hij}-i

321 Dispel the *Two Warning Signs*

☒ *shiong* [ill-omened; crop failure; fierce (Pulleyblank 1991, 346)] seems to be used medically. That is: "the two symptoms (excessive happiness and anger) which indicate a deeper problem (incorrect blend of forces)".

{hij}-i

322 Do not be Happy, Do not be Angry

This seems to be prescriptive ("Just say No") whereas the previous lines were diagnostic.

{hij}-i

323 The vertical and horizontal forces occupy the chest

This is a repetition of line 315.

{hij}-i

324 In all cases the life-force of man

This is a repetition of line 306.

{hij}-i

325 Necessarily uses the vertical and horizontal forces

{hij}-i

326 In order to lose it

{hij}-i

327 One necessarily uses Happiness, Anger, Anxiety, Concern

This is the only occurrence of 患 *huann* in the text. Its use here seems slightly odd. *Huann* seems to be a technical term used to describe a certain kind of anxiety separate from the kind of 'anxiety' meant by 憂 *iou* which has been used throughout the text.

{hij}-i

328 This said thing is reasoned to be

How *shyh guh* is used in this text is very difficult to formulate precisely.

{hij}-i

329 For halting anger there is nothing to compare with Poetry

{hij}-i

330 For dispelling anxiety there is nothing comparable to Music

The last character is Music not Joy (an alternate possibility).

{hij}-i

331 For regulating Joy there is nothing comparable to the Rites

{hij}-i

332 For safeguarding the Rites there is nothing comparable to Respect

{hij}-i

333 For safeguarding Respect there is nothing comparable to *Serenity*

{hij}-i

334 Being internally *Serene*, externally Respectful

{hij}-i

335 One is able to return to his *Shing*

性 *Shing* only occurs in these two lines. It has a wide range of meanings: "life; nature; property; quality; sex" (Pulleyblank 1991, 346). Rickett translates *shing* as "true nature" (1966, 166) - an example of imposing a meaning when one isn't readily evident. Clearly, *shing* is a technical term, but how specific it is seems only inferable from outside sources, therefore leaving it untranslated (or really translating it as it is) seems to maintain the strangeness and the uncertainty in the term as it is used here.

{hij}-i

336 The *Shing* is greatly affixed

{hij}-i

337 In all cases the *Daw* of Eating

{hij}-i

338 The *Great Sustenance*

Rickett views the use of *dah* in this line and in 340, 357 to be a factitive verb (to make bigger, greater). Both the *Great Sustenance* and the *Great Restoration* seem to be technical terms for over-eating and fasting.

{hij}-i

339 The *Form* becomes harmed and (the effects) become visible (are not hidden)

This line strikes the attention of most scholars as in need of repair. The first issue is with the word order. The consensus is that the *erl* should be moved to the third position in the line to make the line resemble line 341. The second point is that the last character in the line should be written with the grass radical giving the character 藏 *tsarng* [conceal; store (Pulleyblank 1991, 45)]. Ding ShyhHarn (see Guo 1956, 793) would go further and move *shaang* to the second position in the line so that both lines 339 and 341 begin with the syntactic structure N + Vi + *erl*. This all seems very *ad hoc* and without a view towards the larger structures of the NeyYeh. Clearly this part of the NeyYeh is very swampy and the number of

fix-ups per line is increasing.

The effects of gorging is the topic of the sentence and line 339 is a pair of coordinated comments.

{hij}-i

340 The *Great Restoration*

See note 338.

{hij}-i

341 The bones become withered and the blood stagnant

{hij}-i

342 As for the range between *Sustenance* and *Restoration*

{hij}-i

343 This place is called *Where Harmony is Brought About*

In discussing 此 *tsy* Graham states that *tsy* is "an independent pronoun not used as adjunct . . ." meaning "(the object or place here) contrasting with 是 *shyh* (what is judged to be)" (1978, 560). Adopting this distinction for the NeyYeh means that the difference between 是謂 and 此謂 can be expressed as being similar to the difference between "This process is called . . ." and "This object/place is called . . .". It still remains to be seen if in fact this distinction holds for the NeyYeh or any other Pre-Hann text besides *MohTzyy*.

{hij}-i

344 (This Place) Is that where the *Jing* is housed

See note 249.

{hij}-i

345 (This Place) Is that where knowledge is engendered

{hij}-i

346 When Fasting and Gorging fail to stay within acceptable limits

See note 318.

{hij}-i

347 Invoke this *Standard*:

This line is a repetition of line 319.

{hij}-i

348 If one over-eats then vigorously move about

Lines 348, 349, 350 are similar in form: S_1 則 S_2 where S_1 is the protasis consisting of a subject, in these cases a single noun (which also acts as a topic) and S_2 is the apodosis consisting of two characters. The assumption is that these two-character phrases are syntactically parallel. The topic of the sentence was introduced in 347 and is 'what to do when one's fasting and gorging go beyond acceptable limits'. [Herforth broadly defines two uses of *tzer*. The first is to "mark the conditional clause as unspecific or generic"; the second to "point up contrast topics (not "subjects"..)". [His example is: 夏多積薪冬則場之 Juanq 81.29.29 'In summer (the ancients) put up a lot of firewood; in winter they warmed themselves in front of it') (Herforth 1987, 231)]. These lines are repeated 348 - 351, 349 - 353, 350 - 355 with the single alteration of 則 to 不 *buh* (a marker of verbal negation). This suggests that either each of S_2 is composed of Vt + O or S_2 = Adv + Vi where the activity of Vi is referring to the topic. It seems that the latter reading is the most popular among scholars for the first line and the former for the remaining two lines. The characters 廣 *goang* [wide, broad (Pulleyblank 1991, 114)] and 長 *charng jaang* [(long; long lasting, always)/(grow; elder; chief, head) (Pulleyblank 1991, 50 & 398)] invite emending. Jang PeyLuen emends *goang* to 曠 *kuang* which he defines as the verb 'to neglect, put aside' (曠廢)(Guo 1956, 792). Guo MohRuoh (Guo 1956, 794) would emend *charng* to 忘 *wang* [to forget (Pulleyblank 1991, 319)].

It seems contradictory to prescribe an activity described as 疾 *jyi* [hurried, urgent; feverish, illness; hate) (Pulleyblank 1991, 140)] to cure an act of excessive behaviour - not to mention uncomfortable.

{hij}-i349 If one fasts too much then neglect *Contemplation*{hij}-i

350 If one is old then put aside deliberations

The use of 慮 *liuh* [think, ponder; concern, anxiety (Pulleyblank 1991, 205)] is another description of mental activity mentioned in the text. Since it only occurs here and in line 355 its range of meaning is unclear. In *MohTzzy*, *liuh* is an important term used to understand the problems inherent in 'knowing' and 'seeing'. 慮，求也。(慮)。慮也者：以其知有求也，而不必得之。(若睨)
"Liuh (thinking/forethought) is the seeking. 'Thinking': by means of one's intelligence one seeks something, but does not necessarily find it. (Like peering)" (Graham 1978, 267).

Is it the reminiscences/reflections that cause anxiety which is detrimental? Is it the responsibilities which are detrimental? Is it a technical term for some geriatric phenomenon?

{hij}-i

351 If one over-eats but does not vigorously move about

{hij}-i

352 The *Chih* does not *penetrate* to the *Four Extremities*

Four Extremities is a term to describe the four limbs (Jaw 1982, 87). How it differs from the *Four Contours* of line 288 is not apparent. The fact that these two terms are used to describe the same thing could indicate that since a different terminology is being employed the parts of the text are different either in period, origin or author.

{hij}-i

353 If one fasts too much but does not neglect *Contemplation*

{hij}-i

354 Then upon breaking the fast the desire to fast excessively will not be eliminated

Yu Yueh suggests that *baw* should be replaced by *ji* since *bao* disrupts the pattern of these six lines (351-356) (Guo 1956, 794). I retain the *bao* which is admittedly confusing since it introduces a different sense of the word in the midst of its technical usage and also for the reasons stated by Yu. I am essentially following Jaw in this (for the sake of textual description not because I am persuaded). 飽食也不能消除俄意 [Even if one breaks the fast, the desire to fast excessively will not be eliminated] (Jaw 1981, 87).

{hij}-i

355 If you are old and do not put aside deliberations

{hij}-i

356 This will cause problems and quickly sap your strength

{hij}-j

357 Enlarge the *Shin* and be made courageous

Both lines 357 and 358 can be parsed, on the basis that *erl* can express a temporal relation among states of being, as (Vt + O) 而 Vi. "Verb the object and be . . ." Also, both pairs of Vt and Vi are related semantically: *dah* is to *gaan* (approximately) as *kuan* is to *goang*. Using this pattern as a syntactic model, the translation (or really the explication) becomes the phrase: "Enlarge the *Shin* and be courageous/ Stretch the *Chih* and be comforted". It is clear that *dah* and *goang* must be considered, by us, metaphorically since both the *Shin* and *Chih* are non-corporeal. To the believer, though, the *Shin* and *Chih* are not epistemologically immediate; there is no question of their existence. *Dah* and *goang* must be considered to be a description of techniques used either to effect change or to make contact with these entities. The techniques may be as highly structured as a definite sequence or series of exercises leading to a rendering of: "Do the physical/spiritual exercise we call the *Dah Shin* and feel the described effect" or the techniques may be unstructured "If one can find a way to *Dah Shin* one can feel the described effect".

I have used the more common reading of *goang* and taken the range of potential meanings the most

suitable, in terms of syntax and context, in line and 357 and used *kuang* in line 349. This change from one range of meaning to another is a common feature in Pre-Hann Chinese and is also the source of a great deal of confusion.

{hij}-j

358 Stretch the *Chih* and be *comforted*

{hij}-j

359 His form is at rest

{hij}-j

360 And is not shifted

{hij}-j

361 Able to safeguard the *One*

{hij}-j

362 And renounce the *Myriad Irritations*

{hij}-j

363 Upon seeing profit [he] is not tempted

{hij}-j

364 Upon seeing harm [he] is not afraid

The difference between 害 *hay* (lines 227, 260 and above) and 賞 *shaang* (line 266) is not clear.

{hij}-j

365 *Stretched and Relaxed* he is *Benevolent*

Could this be read similarly to lines 357 & 358?

{hij}-j

366 Alone enjoying his body

{hij}-j

367 This process is called *Rotating Chih*

This follows the emending of 雲 *yun* [cloud (Pulleyblank 1991, 389)] to 運 *yunn* [revolve; move, transport (Pulleyblank 1991, 390)] (see Guo 1956, 794).

{hij}-j

368 Thought courses (or thoughts and conduct) resemble the *Heavens*

How does 似 *syh* relate to 若 *ruoh* and 如 *ru* in the text? What does it mean to 似天 *sytian*? 天的

什麼？

{hij}-j

369 In all cases the life-force of man

See note 306 for discussion of 'life-force of man'.

{hij}-j

370 Necessarily uses its *Joy*

This is the only time in the text *huan* appears. It would be interesting to contrast the differences in *huan* and *shii* (Happiness) to illuminate the understanding of the emotional forces underlying the belief system.

{hij}-j

371 If one succumbs to anxiety (is anxious) then one loses this binding thread

{hij}-j

372 If one succumbs to anger (is angry) then one loses this starting point

In *MohTzzy*, *duan* is defined as: "端，體之無厚而最者也 'The *duan* (starting point) is the unit without dimension which precedes all others'" (Graham 1978, 310). Graham also points out "whereas in English a stick has two ends in Chinese it has two beginnings" (310) which is a rather succinct way of illustrating the certain arbitrary features of language which may determine the way in which we think.

{hij}-j

373 With Anxiety, Sadness, Happiness, Anger

This list is neither made of contrasting pairs nor emotional states belonging to the same general type, positive or negative. The list is certainly not a complete inventory of extreme emotional states which would prohibit the *Daw* from residing.

{hij}-j

374 The *Daw* has no place it can be housed

{hij}-j

375 When en-passioned by *Love* and *Desire* - Still them

愛 *ay* cannot be considered a replacement for 焉 *ian* in this line; at least there is no call for this as there was in line 66 - the only two times in which *ay* appears in the text.

{hij}-j

376 When faced with *Stupidity* and *Chaos* - straighten them out

Jaw following Jang PeyLuen emends 遇 *yuh* [encounter, meet unexpectedly; entertain (Pulleyblank 1991, 383)] to 愚 *yu* [stupid (Pulleyblank 1991, 381)] (Guo 1956, 795) apparently on the grounds of syntactic and to some degree semantic parallelism. The assumption is that the lines are of the

grammatical type: (Vi+Vi)+ (Vt+O) "Being this being that verb it" as opposed to the lines as they are in the SBTk edition : [375] (Vi+Vi)+ (Vt+O) [376] (Vt+O) (Vt+O)". Jang settles on an alternative that is (to him) the right blend of syntactic, semantical, historical and phonological elements to arrive at *yu*. In essence Jang claims that this is a case of a spelling mistake - based upon the homophonous or near homophonous nature of the two words. Wang NiannSuen however, emends *yuh* to 過 *guoh* [pass, exceed, surpass, transgress (Pulleyblank 1991, 117)] (see Guo 1956, 795). Wang seeks to reconcile the line similarly to Jang, though without the phonological component. Wang's claim is that this is a transcription mistake - based, it seems, on the fact that the two characters are very similar in appearance hence easily mistaken one for another if one is not paying attention to one's copying or if the source is hard to read.

{hij}-j

377 Do not *Pull* it. Do not *Push* it.

These terms *pull* and *push* may be similar to the usage ascribed to *dah* and *goang*. There may be a well defined (to the adherents) class of 'physical metaphor' verbs.

{hij}-j

378 *Blessings* will thereafter be *Self-Returning*

福 *fu* is an interesting result to this kind of effort given the emphasis on moderation. Is *fu* the desired result or a mere perk?

{hij}-j

379 The far-off *Daw* is *Self-Arriving*

{hij}-j

380 It is both a source of support and reliable

{hij}-j

381 Be tranquil then obtain it

{hij}-j

382 Be impetuous then lose it

{hij}-j

383 As for the *Ling Chih* residing in the *Shin*

I haven't figured out what to do with *ling*. It is obviously a critical modifier of *Chih*, yet how does one assess its verbal/nominal attributes? There really is a hodgepodge of terms being used in this part of the text.

{hij}-j

384 In its every coming and every flowing away

{hij}-j

385 Its minuteness is such that there is no inside

{hij}-j

386 Its vastness is such that there is no outside

{hij}-j

387 The reason why one loses it

{hij}-j

388 Is that impetuosity creates a harmful environment

{hij}-j

389 When the *Shin* is able to grasp *Tranquility*

{hij}-j

390 The *Daw* thereafter will be *Self-Affixing*

{hij}-j

391 Of those men who *occupy* the *Daw*

{hij}-j

392 Internal structure assisted and difficulties released

Wang YiinJy in Guo suggests three separate emendations to this line: 1) 丞 *cherng* [assist; assistant, official (Pulleyblank 1991, 54)] should be 蒸 *jeng* [steam; winter sacrifice; offer, present; numerous (Pulleyblank 1991, 403)]; 2) 屯 *juan* is 毛 *mau* [hair, down, fur, feathers (Pulleyblank 1991, 208)]; 3) the meaning of 泄 *shieh* is to be taken as 發 *fa* [send out; emit; start; open (Pulleyblank 1991, 89)] (see Guo 1956, 795). Rickett, following Wang, translates the line as follows: "The lines [of his face] emit [harmoniousness]" (Rickett 1966, 168). Wang's arguments are based upon the existence of a similar passage in the *HwaiNan Tzyy* (20/3a). I choose to translate the line as it stands not because of exegetical merit but to bear in my own mind that this is the way the line appears in the SBTk text. The translation I have provided does not convey the very unorthodox language in the lines - unorthodox for someone versed in Pre-Han thought. The translation is a reflection of the grammar and syntax though perhaps not the intent.

{hij}-j

393 In the chest there is no defeat

Jaw, it seems, views *bay* as both a 'psychological' term and a physical one 沒有郁積敗壞的東西

[there are no elements of pent-up degeneracy] (1981, 87).

{hij}-j

394 In the *Daw* of regulating desires

{hij}-j

395 The *Myriad Things* are not harmed

Jaw translates this as 就不受萬物的危害了 [and you will not receive the harm of the myriad things] (1981, 87). This means that he feels that *hay* is normally intransitive and thus the activity of the verb passes back to the subject 'you' of line 395 "[You] in regulating the *Daw* of desires."

{hij}-j

6.1 Conclusions

As an introductory study of a description of the visible features of the NeyYeh chapter of the SyhBuh TsorngKan edition of the *GoanTzyy*, the work of this thesis has produced new information in five areas: i) the history of the *GoanTzyy*, text especially concerning the *pian* numbering and Liou Shianq's role in the redaction process, ii) the application of a new descriptive technique, the **RIA** (Robinson Index of Agreement), to a Pre-Hann text, iii) identification of patterns of word usage in the NeyYeh and the creation of concordances, iv) a suggested partitioning of the text, and v) a translation of the text emphasising the grammatical and lexical components of the NeyYeh.

Chapter 1 of the thesis established a provisional chronology of the *GoanTzyy*. The *GoanTzyy* known to scholars today arises out of a collection of texts redacted by Liou Shianq between 22 - 16 B.C. There exist certain features of the *GoanTzyy* that have remained invariant from before Liou's redaction up to the modern exemplars of the *GoanTzyy* (specifically the **SBTK** exemplar) at least with respect to most other formal qualities besides content.

The hypothesis that Liou 'blended' various *pian* from the Proto-*GoanTzyy* to form his redaction, should in light of the evidence outlined in Chapter 1, be replaced by the simpler hypothesis that one can exactly account for the discrepancy in the number of *pian* by

assuming that what is now *pian* 80 was divided six times to produce *pian* 80-86 of Liou's redaction. The hypothesis suggested by this thesis treats the issue of textual 'blending' as independent of both Liou's editorial mandate and the number of *pian* in the *GoanTzyy*.

Chapter 2 focused on the context for the description of the text. To undertake a description of a specific *pian* in the *GoanTzyy*, the *NeyYeh*, because its provenance is uncertain, requires that we examine the nature of description itself. One must recognize that the kinds of questions which can be asked by descriptive processes determine, to some extent, the kinds of answers produced.

The remainder of the thesis focused on the implications of the index of the **SBTK** *NeyYeh* created using the *tzyh* typology. This typology, though unsuitable as a means of describing the total semantic content of the text, makes possible an analysis of the text based on quantitative data by enabling the counting, relating and mapping of elements within the text. The most striking formal feature of the text is that it is composed of 1,565 characters and contains approximately 370 different *tzyh*.

From the creation of the initial index a number of different descriptions were identified: typographical variants, concordances, pattern matching, the **RIA** process and, with the addition of **Newline** markers, a translatable text. The identification of pattern types seemed to elucidate two different kinds of information from the text. The *tzyh* strings

describe the amount of *tzyh* repetition: what is there and how many times it occurs. The pattern matching types, on the other hand, emphasise structure: the range of possibilities which exists for a particular structure within the NeyYeh.

The concordances and pattern matching will provide easier access for scholars to the various lexical phenomenon of interest in the NeyYeh including providing assistance in overcoming problems of coherency. In addition, the computer programs developed to produce the concordances for this thesis are perhaps, from a theoretical standpoint, more important than the concordances themselves. The implication that similar programs could be used by Sinologists studying Pre-Hann texts should extend the boundaries of how texts are indexed and the ease with which concordances can be created that go beyond the 'one word-what place' paradigm of traditional concordances.

Similarly, the application of the **RIA** process to the NeyYeh may provide new opportunities to describe the text in a meaningful way. The **RIA** process, while not statistically inferential, does: i) identify lexical variation, and ii) reveal patterns and divisions within the text. As stated in Chapter 4, the **SBTK** NeyYeh was divided by means of the **RIA** process into six lexically distinct segments which may shed new light on the provenance of the NeyYeh. Namely, there is a core of high lexical similarity constituting approximately 60% of the text. The three equal segments which make up another 30% of the text are lexically dissimilar not only to the core segments but to each

other. The final 10% of the text appears to be intermediately dissimilar from the core and from the remaining 30%, with perhaps a higher degree of similarity to the core.

In an attempt to bridge the description of the NeyYeh under the *tzyh* typology with the description of the NeyYeh as a text to be read, a translation was offered in Chapter 5. The translation emphasised the important formal qualities of the overall structure of the text as manifested in both the syntax and the vocabulary. A conscious decision was made to identify several terms as 'technical' to facilitate an appreciation of the range of potential meaning within the text.

Though the identification of the semantic content of the NeyYeh was constantly referred to in the translation, it seems a total description of the semantic content is an enormously complicated question, inextricably linked to epistemological issues beyond the scope of this or any one thesis. Nevertheless, each time the semantic content and the visible features of a text are described both sides are honed - the description of the physical features of the text illuminating problems in understanding the semantic content and discussion of the semantic content forcing physical description to become more precise.

6.2 Further Research

Continued research suggested by the evidence and arguments detailed in this thesis could proceed in two different directions: focusing further on the *GoanTzyy* or adapting the

methods outlined in the thesis to other Pre-Hann texts. Also, using the results presented in this thesis the **SBTK NeyYeh** could be reevaluated based upon the divisions found by the **RIA** process.

Specifically, one question for further research is - how do the segments identified by their lexical variation relate to the differences in their semantic content? The lack of a straight forward relationship can be seen if one counts the number of lines in each segment of the

Table 19 Line Numbers and RIA Segments in the SBTK NeyYeh

RIA Segment	Boundary Start	Boundary End	Place Number	Line Number	Lines per Segment
{a}	1	156	194	39	39
{b}	157	312	393	81	42
{c	313	468	495	103	22
d	469	624	790	165	62
e}	625	780	984	203	38
{f}	781	936	1,179	242	39
{g}	937	1,092	1,377	282	40
{h	1,093	1,248	1,567	318	36
i	1,249	1,404	1,760	355	37
j}}	1,405	1,565	1,961	395	40
mean 39.5 lines per segment; std. 9.17					

text. It is clear that the line numbers on average are about 40 lines per segment (see table 19). There is, however, an interesting deviation from this pattern in sections c and d

which have 22 and 62 lines per segment respectively.

Given that the number of lines has some bearing on the semantic content (as discussed in chapter 3), it is interesting that although segments **c** and **d** are very similar lexically (they are in fact grouped as the same larger component in the text segment {**cde**}), they are quite different in the number of lines and in some sense the semantic structure.

Conversely, segments which differ in their lexical variation {**a**}, {**b**}, {**f**}, {**g**} have in some sense a higher degree of semantic similarity given the similarity in the number of lines in their respective segments.

Clarifying this relationship between segments and semantic structure might prove useful in providing limitations on the inferences that can be drawn from the **RIA** process when applied to the NeyYeh and other Pre-Hann texts.

Another area for further research should address the issues surrounding the Proto-*GoanTzyy*. If one accepts the assumption that there was no textual 'blending' by Liou Shianq and that he divided one of the *pian* into seven new *pian* (*pian* 80-86) as outlined in Chapter 1, one could begin to look at the history of the Proto-*GoanTzyy* in a new light.

This hypothesis, if verifiable, has implications for both the history of the *GoanTzyy* and the Proto-*GoanTzyy*. For the history of the *GoanTzyy* it raises the question - since there is no

textual blending ascribed to Liou Shianq where does this blending arise from or is there really any 'blending' at all? Furthermore, should Liou Shianq's role in the textual transmission of the *GoanTzyy* focus more on his participation as editor and less on his assumed revisionist role? This new hypothesis put forward in the thesis may also provide clues to problems concerning the provenance and content of the *GoanTzyy* by clarifying other issues related to chronology of the text.

For the Proto-*GoanTzyy* this hypothesis implies that the pre-Liou *GoanTzyy* corpus has at least two stages of development: the foundation text and then the emergence of the commentary *pian*. This line of questioning is highly speculative. The issue of Liou's involvement in the naming of the *pian* needs to be explored. Did he, for example, decide himself that some of the *pian* that he had collected were explanatory and retitled them as such or were these *pian* already explicitly titled? Furthermore, there is a need to determine the length of time between the creation of the original *pian* and their explanatory *pian* (which could range from days to centuries). If this point of departure for future study is successful, can other stages in the development of the Proto-*GoanTzyy* be identified?

Finally, what implications does the history of the *GoanTzyy* have for the provenance of the NeyYeh? When did it become part of the *GoanTzyy* corpus? Are there any features in the NeyYeh that can be identified that would convince scholars of its provenance within the *GoanTzyy* and help us read this very difficult text? Only further description and more

detailed analysis of all the features of the Ney Yeh will determine what it is and where it came from.

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- {a} 1 In all cases the *Jing* of things
- {a} 2 Given this thing (the *Jing* possessed of things) thus they are made, thus they are born
- {a} 3 Below it imbues the five grains with life
- {a} 4 Above it creates the stars in their array
- {a} 5 When it flows amongst the realm of Heaven and Earth
- {a} 6 We call this *daemoniacally numinous*
- {a} 7 When it *hides* within a man's chest
- {a} 8 We call him a *Sagely Man*
- {a} 9 For these reasons the people *Chih*
- {a} 10 In its luminosity!
- {a} 11 (the *Chih*) Is like ascending up to the Heavens
- {a} 12 In its dimness!
- {a} 13 (the *Chih*) Is like entering into the abyss
- {a} 14 In its Vastness!
- {a} 15 It is like being at sea
- {a} 16 In its height!
- {a} 17 It is like being on a barren mountain
- {a} 18 For these reasons these objects are en-*Chih*-ed
- {a} 19 One cannot stop it by means of strength
- {a} 20 Yet one can bring it to rest by means of *Der*
- {a} 21 One cannot hail it by means of sound
- {a} 22 Yet one can welcome it by means of *intention*
- {a} 23 *Respectful* and *Safeguarding*, do not lose it
- {a} 24 This action is called "completing the process of *Der*"
- {a} 25 When *Der* is achieved the knowing will go forth

- {a} 26 The *myriad things* will entirely be obtained
- {a} 27 In all cases it is the *form* of the *Shin*
- {a} 28 Self-fortifying/enriching, self-pervading
- {a} 29 Self-engendering, self-completing
- {a} 30 The means by which one loses it (the *form* of the *Shin*)
- {a} 31 It is necessarily that one employs anxiety, joy
- {a} 32 Happiness, anger, desire, avarice
- {a} 33 If one is able to expel anxiety, joy
- {a} 34 Happiness, anger, desire, avarice
- {a} 35 One's *Shin* may return to *the state of Deliverance*
- {a} 36 It is the *nature* of the *Shin*
- {a} 37 To enrich the state of rest/peace by means of *tranquility*
- {a} 38 Do not hinder it, do not disorder it
- {a} 39 Be an accompaniment and thereupon be self-complete
- {b} 40 Clear! Clear!
- {b} 41 Like being right next to it
- {b} 42 Elusively quick! Elusively quick!
- {b} 43 Like being just about to grasp it but not catching it
- {b} 44 Distant! Distant!
- {b} 45 Like an extreme without an end point
- {b} 46 As for this (the *form* of the *Shin*) to consult it one need not go to great lengths
- {b} 47 Daily we employ its *Der*
- {b} 48 It is the *Daw*
- {b} 49 That is the means by which the *form* is given substance
- {b} 50 Yet one is unable *to keep it without changing it*
- {b} 51 It goes but does not return

- (b) 52 It comes but does not stay
- (b) 53 Indistinct!
- (b) 54 No one hears its sound
- (b) 55 Gigantic!
- (b) 56 And yet it resides in the *Shin*
- (b) 57 Nebulous!
- (b) 58 One cannot see its *form*
- (b) 59 Soaking!
- (b) 60 In our midst and living together (with us)
- (b) 61 One does not see its *form*
- (b) 62 One does not hear its voice
- (b) 63 Yet when we have made a classification of its teleology
- (b) 64 We call that "the *Daw*"
- (b) 65 In all cases the *Daw* has no lodging
- (b) 66 With a good *Shin* and calmly reposed
- (b) 67 When the *Shin* is made tranquil, and the *Chih* is *internalised and organised*
- (b) 68 Then the *Daw* can remain *fixed* (in the *Shin*)
- (b) 69 The *Daw* does not make itself distant
- (b) 70 For the people obtain it (the *Daw*) in order to be productive
- (b) 71 The *Daw* does not make itself apart
- (b) 72 For the people depend on it in order to know
- (b) 73 For these reasons
- (b) 74 Gigantic!
- (b) 75 It (the *Daw*) is like being able to bind it with a rope
- (b) 76 Minute!
- (b) 77 Like a speck that does not occupy space

- {b} 78 As for the *characteristics* of the *Daw*
- {b} 79 How to give voice and acknowledge with sound?
- {b} 80 Cultivate the *Shin*, make tranquil the *Intentions*
- {b} 81 The *Daw* thereupon can be *occupied*
- {cde-c} 82 What the *Daw* is
- {cde-c} 83 Is that which by the mouth
- {cde-c} 84 Is unable to be spoken
- {cde-c} 85 Is that which by the eyes
- {cde-c} 86 Is unable to be observed
- {cde-c} 87 Is that which by the ears
- {cde-c} 88 Is unable to be heard
- {cde-c} 89 It (what the *Daw* is) is the means by which one cultivates the *Shin*
- {cde-c} 90 And *assumes coincidence with the implicit standard* of the *form*
- {cde-c} 91 It is that by which men
- {cde-c} 92 Lose so that they die
- {cde-c} 93 It is what is obtained so that they live
- {cde-c} 94 It is that by which endeavours
- {cde-c} 95 Lose so that they fail
- {cde-c} 96 It is what is obtained so that they reach fruition
- {cde-c} 97 In all cases the *Daw*
- {cde-c} 98 Has no roots, has no stem
- {cde-c} 99 Has no leaves, Has no flowers
- {cde-c} 100 The *myriad things* are born by it
- {cde-c} 101 The *myriad things* are brought to fruition by it
- {cde-c} 102 We name it "the *Daw*"
- {cde-c} 103 Heaven presides over the plumb

- {cde-d} 104 Earth presides over the level
- {cde-d} 105 Man presides over the stable
- {cde-d} 106 Spring, Fall, Winter, Summer
- {cde-d} 107 Are the *timing mechanisms* of Heaven
- {cde-d} 108 Mountains, Hills, Rivers, Valleys
- {cde-d} 109 Are the *building mechanisms* of the Earth
- {cde-d} 110 Happiness, Anger, Taking, Giving
- {cde-d} 111 Are the *mechanisms of the contrivances* of man
- {cde-d} 112 These said things are the reasons
- {cde-d} 113 The *Sagely Man*
- {cde-d} 114 With the course of time
- {cde-d} 115 Is changed to (something) yet is not transformed (changed into)
- {cde-d} 116 In accordance with *things*
- {cde-d} 117 *Changes his residence* yet is not *altered* (by these changes)
- {cde-d} 118 If one is able to *assume coincidence with an implicit standard*
- {cde-d} 119 If one is able to be *serene*
- {cde-d} 120 After this, one has the ability to *stabilize* (hold things in alignment)
- {cde-d} 121 If one hold one's *Shin* in *alignment* at the *centre*
- {cde-d} 122 The perceptions of the eyes and ears will be free of distortions
- {cde-d} 123 The *four branches* (limbs) will be hard and firm
- {cde-d} 124 One can make a residence for the *Jing*
- {cde-d} 125 What *Jing* is
- {cde-d} 126 Is a case of the *Jing* of *Chih*
- {cde-d} 127 The motion of *Chih*
- {cde-d} 128 When the *Daw* is in motion then *life* is in motion
- {cde-d} 129 When *life* is in motion then there is *thought* in motion

- {cde-d} 130 When there is *thought* in motion then there is *intelligence* in motion
- {cde-d} 131 When there is *intelligence* in motion (the motion of *Chih*) stays fixed in the *intelligence*
- {cde-d} 132 In all cases it is the characteristic of the *Shin*
- {cde-d} 133 When it exceeds the state of its *intelligence* then it depletes its *life force*
- {cde-d} 134 When there is a single object and capability of transformation
- {cde-d} 135 We call this (transformation) *numinous*
- {cde-d} 136 When there is a single event and the capability of alteration
- {cde-d} 137 We call this (alteration) *wise*
- {cde-d} 138 Transformation does not exchange *Chih*
- {cde-d} 139 Alteration does not exchange wisdom
- {cde-d} 140 Only *Holding onto* the *One*
- {cde-d} 141 The *JiunTzyy* is able to do this!
- {cde-d} 142 *Holding onto* the *One* without letting go
- {cde-d} 143 He can command the *Myriad Things*
- {cde-d} 144 The *JiunTzyy* commands *Things*
- {cde-d} 145 (and) Is not commanded by *Things*
- {cde-d} 146 *Obtaining the Internalization and Organization* of the *One*
- {cde-d} 147 When a *well-ordered Shin* resides at the *centre*
- {cde-d} 148 When *well-ordered* speech emanates from the mouth
- {cde-d} 149 When *well-ordered* affairs extend to persons
- {cde-d} 150 This being so, then the *Under Heaven* will be *well-ordered*
- {cde-d} 151 When the *One Statement* is attained
- {cde-d} 152 The *Under Heaven* is compliant/devoted/submissive
- {cde-d} 153 When the *One Statement* is established
- {cde-d} 154 The *Under Heaven* is attentive/obedient

- {cde-d} 155 This is what (this above remark) refers to
- {cde-d} 156 When the *form* is not in *compliance with its implicit standard*
- {cde-d} 157 The *Der* does not arrive
- {cde-d} 158 When the *Centre* is not *tranquil*
- {cde-d} 159 The *Shin* does not *achieve what is sought*
- {cde-d} 160 When the *form* is *aligned*, the *Der* conserved
- {cde-d} 161 Heaven is benevolent, Earth is righteous
- {cde-d} 162 Then a flood-like sensation will arrive of itself
- {cde-d} 163 The extremeness of the *Numinous Illumination*
- {cde-d} 164 How Brilliant! [It] knows the *Myriad Things*
- {cde-d} 165 The *Safeguards* of the *Centre* of the *Righteous*, are not in error
- {cde-e} 166 Do not with things disorder the senses
- {cde-e} 167 Do not with the senses disorder the *Shin*
- {cde-e} 168 This said thing is called "the *Centre Obtained*"
- {cde-e} 169 As for the existing of the Noumenon [it] self-animates the body
- {cde-e} 170 [As for its] every coming and every going
- {cde-e} 171 No one is able to *reflect* upon it
- {cde-e} 172 Losing it implies disorder
- {cde-e} 173 Obtaining it implies order
- {cde-e} 174 Carefully clear out its dwelling place
- {cde-e} 175 The *Jing* will thereafter *Arrive of itself*
- {cde-e} 176 When the *Jing* is pondered, contemplate it
- {cde-e} 177 When *tranquility* is thought about, deconstruct it
- {cde-e} 178 With a solemn comportment, a fearful respect
- {cde-e} 179 The *Jing* will thereafter *Affix of itself*
- {cde-e} 180 Obtain it and do not release it

- {cde-e} 181 Then the eyes and ears will not be carried away by excess
- {cde-e} 182 The *Shin* has no other standard (to which it should match)
- {cde-e} 183 Make the *Shin* coincident with an *implicit standard*. Reside at the *Centre*
- {cde-e} 184 The *Myriad Things* obtain the *standard*
- {cde-e} 185 The *Daw* fills the *Under Heaven*
- {cde-e} 186 Everywhere residing with the People
- {cde-e} 187 Yet the People are unable to make it (the *Daw*) intelligible
- {cde-e} 188 In the understanding of the *One Statement*
- {cde-e} 189 Above investigate in the Heavens
- {cde-e} 190 Below extend to the *limits* of the Earth
- {cde-e} 191 Invasively filling the *Nine Regions*
- {cde-e} 192 What the process is called which explains this
- {cde-e} 193 Resides in the refuge of the *Shin*
- {cde-e} 194 When my *Shin* achieves what is sought
- {cde-e} 195 The sense organs thereupon achieve what is sought
- {cde-e} 196 When my *Shin* is stabilized/secured/at rest
- {cde-e} 197 The sense organs thereupon are stabilized/secured/at rest
- {cde-e} 198 That which causes it to be ordered is the *Shin*
- {cde-e} 199 That which causes it to be stabilized is the *Shin*
- {cde-e} 200 The *Shin* thereby conceals the *Shin*
- {cde-e} 201 As for the centre of the *Shin*, it furthermore has a *Shin* therein
- {cde-e} 202 As for the *Shin* in the *Shin*
- {cde-e} 203 The *intention* is that which precedes the *utterance*
- {f} 204 To have the *utterance* then proceed to the *form*
- {f} 205 To have the *form* then proceed to the *name*
- {f} 206 To have the *name* then proceed to the *carrying out*

- (f) 207 To have the *carrying out* then proceed to the *ordering*
- (f) 208 Not *ordered* is necessarily disordered
- (f) 209 Disorder leads to death
- (f) 210 The *Jing* being preserved is self-engendering
- (f) 211 Its outward manifestations thereupon blossom
- (f) 212 The internal manifestations are concealed
- (f) 213 Creating thereby a well-spring
- (f) 214 Flood-like it is harmonious, balanced /level
- (f) 215 Creating thereby a *Chih* abyss
- (f) 216 If the abyss does not dry up
- (f) 217 The *four limbs* are thus strong/firm
- (f) 218 If the well-spring is not exhausted/used up
- (f) 219 The *Nine Orifices* consequently become conduits
- (f) 220 Thereupon (one) is able to make *limits* on Heaven and Earth
- (f) 221 And Cover the *Four Seas*
- (f) 222 [He who] in the *Centre* has no *Confused Intentions*
- (f) 223 On the *Outside* has no perverse/evil disasters
- (f) 224 [Whose] *Shin* is *protected/made whole* at the centre
- (f) 225 [Whose] *Form* is *protected/made whole* on the outside
- (f) 226 [He who] does not *chance upon/encounter* natural disaster
- (f) 227 [Nor] Does not *meet unexpectedly/encounter* human calamity
- (f) 228 We call this (kind of person) a *Sagely Man*
- (f) 229 When one can be *coincident with an implicit standard* and be *serene*
- (f) 230 The skin's complexion is compliant and relaxed
- (f) 231 The perceptions of the eyes and ears will be free of distortions
- (f) 232 The muscles are trustworthy and the bones are strong

- (f) 233 Thereupon be able to be crowned with the *Great Circle*
- (f) 234 And pace out the *Great Square*
- (f) 235 More reflective than the *Great Clarity*
- (f) 236 More visible than the *Great Brightness*
- (f) 237 Respectfully conscientious, that nothing is in error
- (f) 238 Daily renew his *Der*
- (f) 239 In all aspects and locations knowing the *Under Heaven*
- (f) 240 Extending beyond the *Cardinal Points*
- (f) 241 Respectfully disseminating its substance
- (f) 242 This process is called: *the internal being occupied*
- (g) 243 This being so (he does) not return (to a former state)
- (g) 244 This said thing would be an error
- (g) 245 In all cases the *Daw*
- (g) 246 Is necessarily tight, is necessarily close
- (g) 247 Is necessarily broad, is necessarily expansive
- (g) 248 Is necessarily hard, is necessarily firm
- (g) 249 *Safeguard the Good* do not release it
- (g) 250 Drive away the excessive, abandon the superficial
- (g) 251 When one knows its extent
- (g) 252 He returns to the *Daw* and *Der*
- (g) 253 The *Shin made whole/protected* resides at the centre.
- (g) 254 This can neither be concealed nor hidden
- (g) 255 It is made known in the appearance of the *form*
- (g) 256 It is made visible in the colour of the skin
- (g) 257 The Good *Chih* seeks out men
- (g) 258 With more affection than a brother to his brother

- (g) 259 The Evil *Chih* seeks out men
- (g) 260 With more animosity than swords against sabres
- (g) 261 One does not say this sound
- (g) 262 More dreaded than the roar of thunder
- (g) 263 The *form* of the *Shin Chih*
- (g) 264 (Is) Brighter than the Sun and Moon
- (g) 265 More recognizable than one's father and mother
- (g) 266 The rewards are not sufficient to encourage good
- (g) 267 The punishments are not sufficient to deter transgression
- (g) 268 (Provided that) The *Chih's intention* is attained
- (g) 269 The Under Heaven is submissive
- (g) 270 When the *Shin's* intention is fixed
- (g) 271 The Under Heaven is attentive
- (g) 272 Capture the *Chih* as one does a (daemon/Noumen)
- (g) 273 Then the *Myriad Things* become resplendently constructed
- (g) 274 To have the power to *Capture!*
- (g) 275 To have the power to *Unify!*
- (g) 276 To be able without cracked bones or stalks
- (g) 277 To know the auspicious from the ill omened
- (g) 278 To have the power to *Affix*
- (g) 279 To have the power to *Accomplish*
- (g) 280 To be able not to seek it out from all the experts
- (g) 281 Yet obtain this accomplishment
- (g) 282 *Contemplate it. Contemplate it.*
- {hij-h} 283 Try again *Contemplate it*
- {hij-h} 284 *Contemplate it, yet it is not penetrated*

- {hij-h} 285 When the *daemoniacally numinous* penetrates it
- {hij-h} 286 It is not the strength of the *daemoniacally numinous*
- {hij-h} 287 It is the *extensibility* of the *Jing-Chih*
- {hij-h} 288 When the *Four Contours* have been made *coincident with the implicit standard*
- {hij-h} 289 When the *Blood-Chih* has been made *tranquil*
- {hij-h} 290 *Unify the Intentions, Capture the Shin*
- {hij-h} 291 The eyes and ears are not vitiated
- {hij-h} 292 Although distant it seems near
- {hij-h} 293 *Contemplating* and exploring engender wisdom
- {hij-h} 294 Tardiness and vacillation engender anxiety
- {hij-h} 295 Violence and arrogance engender resentment
- {hij-h} 296 Anxiety and depression engender illness
- {hij-h} 297 With illness there are complications and then death
- {hij-h} 298 *Contemplate* it do not let it be released
- {hij-h} 299 On the inside complications, on the outside emaciation
- {hij-h} 300 If a *standard* (to which it should match) is not made near the outset
- {hij-h} 301 Life thereafter relinquishes the residence
- {hij-h} 302 When eating there is nothing comparable to not being satiated
- {hij-h} 303 When *contemplating* there is nothing comparable to not causing it to arrive
- {hij-h} 304 Suitably regulate this mid-point
- {hij-h} 305 It will thereafter be *Self Arriving*
- {hij-h} 306 In all cases the life-force of man
- {hij-h} 307 The Heavens produce its *Jing*
- {hij-h} 308 The Earth produces its Form
- {hij-h} 309 Conflation of these is the means by which we are fashioned
- {hij-h} 310 The man being correctly apportioned thereupon is born

- {hij-h} 311 If it is not correctly apportioned he is not born
- {hij-h} 312 When examining the *Daw* of *correct apportionment*
- {hij-h} 313 Its *Jing* is not seen
- {hij-h} 314 Its distinguishing characteristics are not classed
- {hij-h} 315 When the vertical and horizontal forces occupy the chest
- {hij-h} 316 Being blended appropriately in the *Shin*
- {hij-h} 317 This (the resultant blended force) is the means to a Long Life
- {hij-h} 318 When Happiness and Anger fail to stay within acceptable limits
- {hij-i} 319 Invoke this *Standard*:
- {hij-i} 320 Regulate the *Five Appetites*
- {hij-i} 321 Dispel the *Two Warning Signs*
- {hij-i} 322 Do not be Happy, Do not be Angry
- {hij-i} 323 The vertical and horizontal forces occupy the chest
- {hij-i} 324 In all cases the life-force of man
- {hij-i} 325 Necessarily uses the vertical and horizontal forces
- {hij-i} 326 In order to lose it
- {hij-i} 327 One necessarily uses Happiness, Anger, Anxiety, Concern
- {hij-i} 328 This said thing is reasoned to be
- {hij-i} 329 For halting anger there is nothing to compare with Poetry
- {hij-i} 330 For dispelling anxiety there is nothing comparable to Music
- {hij-i} 331 For regulating Joy there is nothing comparable to the Rites
- {hij-i} 332 For safeguarding the Rites there is nothing comparable to Respect
- {hij-i} 333 For safeguarding Respect there is nothing comparable to *Serenity*
- {hij-i} 334 Being internally *Serene*, externally Respectful
- {hij-i} 335 One is able to return to his *Shinq*
- {hij-i} 336 The *Shinq* is greatly affixed

- (hij-i) 337 In all cases the *Daw* of Eating
- (hij-i) 338 The *Great Sustenance*
- (hij-i) 339 The *Form* becomes harmed and (the effects) become visible (are not hidden)
- (hij-i) 340 The *Great Restoration*
- (hij-i) 341 The bones become withered and the blood stagnant
- (hij-i) 342 As for the range between *Sustenance* and *Restoration*
- (hij-i) 343 This place is called *Where Harmony is Brought About*
- (hij-i) 344 (This Place) Is that where the *Jing* is housed
- (hij-i) 345 (This Place) Is that where knowledge is engendered
- (hij-i) 346 When Fasting and Gorging fail to stay within acceptable limits
- (hij-i) 347 Invoke this *Standard*:
- (hij-i) 348 If one over-eats then vigorously move about
- (hij-i) 349 If one fasts too much then neglect *Contemplation*
- (hij-i) 350 If one is old then put aside deliberations
- (hij-i) 351 If one over-eats but does not vigorously move about
- (hij-i) 352 The *Chih* does not *penetrate* to the *Four Extremities*
- (hij-i) 353 If one fasts too much but does not neglect *Contemplation*
- (hij-i) 354 Then upon breaking the fast the desire to fast excessively will not be eliminated
- (hij-i) 355 If you are old and do not put aside deliberations
- (hij-j) 356 This will cause problems and quickly sap your strength
- (hij-j) 357 Enlarge the *Shin* and be made courageous
- (hij-j) 358 Stretch the *Chih* and be *comforted*
- (hij-j) 359 His form is at rest
- (hij-j) 360 And is not shifted
- (hij-j) 361 Able to safeguard the *One*

- (hij-j) 362 And renounce the *Myriad Irritations*
- (hij-j) 363 Upon seeing profit [he] is not tempted
- (hij-j) 364 Upon seeing harm [he] is not afraid
- (hij-j) 365 *Stretched and Relaxed* he is *Benevolent*
- (hij-j) 366 Alone enjoying his body
- (hij-j) 367 This process is called *Rotating Chih*
- (hij-j) 368 Thought courses (or thoughts and conduct) resemble the *Heavens*
- (hij-j) 369 In all cases the life-force of man
- (hij-j) 370 Necessarily uses its *Joy*
- (hij-j) 371 If one succumbs to anxiety (is anxious) then one loses this binding thread
- (hij-j) 372 If one succumbs to anger (is angry) then one loses this starting point
- (hij-j) 373 With Anxiety, Sadness, Happiness, Anger
- (hij-j) 374 The *Daw* has no place it can be housed
- (hij-j) 375 When en-passioned by *Love* and *Desire* - Still them
- (hij-j) 376 When faced with *Stupidity* and *Chaos* - *straighten them out*
- (hij-j) 377 Do not *Pull* it. Do not *Push* it.
- (hij-j) 378 *Blessings* will thereafter be *Self-Returning*
- (hij-j) 379 The far-off *Daw* is *Self-Arriving*
- (hij-j) 380 It is both a source of support and reliable
- (hij-j) 381 Be tranquil then obtain it
- (hij-j) 382 Be impetuous then lose it
- (hij-j) 383 As for the *Ling Chih* residing in the *Shin*
- (hij-j) 384 In its every coming and every flowing away
- (hij-j) 385 Its minuteness is such that there is no inside
- (hij-j) 386 Its vastness is such that there is no outside
- (hij-j) 387 The reason why one loses it

- {hij-} 388 Is that impetuosity creates a harmful environment
- {hij-} 389 When the *Shin* is able to *grasp Tranquility*
- {hij-} 390 The *Daw* thereafter will be *Self-Affixing*
- {hij-} 391 Of those men who *occupy* the *Daw*
- {hij-} 392 Internal structure assisted and difficulties released
- {hij-} 393 In the chest there is no defeat
- {hij-} 394 In the *Daw* of regulating desires
- {hij-} 395 The *Myriad Things* are not harmed

Concordances to the NeyYeh

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
安	20 (94), 37 (183), 66 (320), 105 (503), 193 (935), 196 (947), 197 (951), 199 (959), 211 (1024), 359 (1781)	10	an	?an	質	51
傲	295 (1447)	1	aw	!sj	!SJ	343
愛	66 (321), 375 (1857)	2	ay	?+ts	物	237
飽	302 (1486), 346 (1712), 348 (1722), 351 (1737), 354 (1754)	5	bao	pru?	幽	331
暴	295 (1446)	1	baw	bawks	藥	339
敗	95 (457), 393 (1951)	2	bay	hprats	月祭	177
悲	373 (1848)	1	bei	prj+j	微	354
被	78 (376), 221 (1071)	2	bey	sy	SJ	196
備	273 (1334)	1	bey	brj+ks	職	292
變	115 (545), 136 (641), 139 (652)	3	biann	prjons	質	211
偏	239 (1162)	1	blann	sj	SJ	275
必	31 (152), 172 (827), 173 (832), 208 (1010), 246 (1195), 246 (1197), 247 (1200), 247 (1202), 248 (1205), 248 (1207), 325 (1602), 327 (1612), 370 (1832)	13	bih	sj	SJ	77
蔽	254 (1237)	1	bih	sj	SJ	304
彼	36 (177), 69 (333), 71 (343), 202 (978), 305 (1499), 379 (1877)	6	bii	sj	SJ	86

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
兵	260 (1268)	1	bing	prjang	陽	315
薄	250 (1218), 299 (1470)	2	bor	phak	鐸	307
搏	272 (1327), 274 (1338), 290 (1423)	3	bor	sj	SJ	318
不	19 (86), 21 (98), 43 (212), 46 (226), 50 (246), 51 (252), 52 (257), 58 (280), 61 (294), 62 (299), 69 (335), 71 (345), 84 (404), 86 (413), 88 (422), 115 (547), 117 (555), 138 (648), 139 (653), 142 (671), 145 (684), 156 (743), 157 (747), 158 (751), 159 (755), 165 (789), 166 (792), 167 (798), 181 (873), 187 (902), 208 (1008), 216 (1047), 218 (1057), 226 (1095), 227 (1100), 243 (1184), 254 (1235), 261 (1270), 266 (1296), 267 (1303), 284 (1389), 291 (1428), 298 (1464), 300 (1472), 311 (1530), 311 (1532), 313 (1542), 314 (1547), 322 (1586), 322 (1588), 339 (1678), 351 (1738), 352 (1743), 353 (1750), 354 (1756), 355 (1760), 360 (1784), 363 (1798), 364 (1803), 395 (1960)	60	buh	sj	SJ	46
卜	276 (1347)	1	buu	pok	屋	324
產	70 (341)	1	chaan	lsj	!SJ	146
察	189 (913), 265 (1290), 312 (1535)	3	char	lsj	!SJ	238
長	317 (1562), 350 (1734), 355 (1761)	3	chang	Htrjang	陽	362
成	24 (117), 25 (121), 29 (144), 39 (195), 63 (307), 96 (462), 101 (486), 343 (1698)	8	cheng	djeng	耕	60
懲	267 (1306)	1	cheng	dr+ng	蒸	293
丞	392 (1943)	1	cheng	lsj	!SJ	403

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
取	110 (528)	1	cheu	tshjo?	侯	200
窳	219 (1061)	1	chiaw	lsj	ISJ	269
氣	9 (46), 18 (83), 67 (325), 126 (594), 127 (600), 138 (650), 215 (1042), 257 (1251), 259 (1261), 263 (1281), 268 (1309), 272 (1328), 287 (1406), 289 (1417), 352 (1742), 358 (1775), 367 (1819), 363 (1898)	18	chih	lsj	ISJ	32
棄	362 (1792)	1	chih	khjits	質	406
親	258 (1255)	1	chin	tshjin	真	317
清	235 (1145)	1	ching	tshjeng	耕	258
秋	106 (507)	1	chiou	tshjiw	幽	193
勸	266 (1299)	1	chiuann	lsj	ISJ	296
去	33 (163), 321 (1581), 330 (1628)	3	chiuh	kh(r)jas	魚	80
充	28 (137), 49 (240), 241 (1175), 338 (1673), 342 (1690)	5	chong	tho/ung(?)	東	68
醜	314 (1548)	1	choou	thju?	幽	350
重	263 (1382)	1	chong	drjong	東	348
出	25 (124), 148 (702), 307 (1511), 308 (1516)	4	chu	thjut	物	62
川	108 (518)	1	chuan	KHju/on	文	170

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
春	106 (506)	1	chuen	thjun	文	159
處	374 (1855)	1	chuu	KHja?	魚	147
除	174 (836)	1	chwu	sj	SJ	233
強	232 (1129)	1	chyang	!sj	!SJ	286
其	30 (146), 47 (231), 51 (250), 52 (255), 54 (265), 58 (282), 61 (296), 62 (301), 63 (306), 75 (360), 77 (370), 174 (837), 211 (1022), 238 (1159), 241 (1174), 251 (1222), 307 (1512), 308 (1517), 313 (1540), 314 (1545), 320 (1577), 321 (1582), 335 (1659), 359 (1779), 366 (1813), 370 (1834), 385 (1907), 386 (1912)	28	chyi	sj	SJ	73
齊	304 (1497)	1	chyi	Hts(h)+j	微	329
情	36 (180), 78 (379)	2	chyng	sj	SJ	87
窮	45 (220), 77 (372), 220 (1067), 240 (1167)	4	chyong	g(r)jung	冬	97
求	280 (1366)	1	chyou	grju	幽	320
泉	213 (1032), 218 (1055)	2	chyuan	SgWJan	質	259
全	224 (1086), 225 (1091), 253 (1230)	3	chyuan	!sj	!SJ	268
大	233 (1134), 234 (1139), 235 (1144), 236 (1149), 336 (1664), 338 (1672), 340 (1681), 357 (1769), 386 (1913)	9	dah	!ats	月祭	287
道	48 (235), 64 (311), 65 (314), 68 (328), 69 (334), 71 (344), 78 (377), 81 (391), 82 (396), 97 (466), 102 (491), 128 (602), 185 (891), 245 (1193), 252 (1227), 312 (1538), 337 (1670), 374 (1852), 379 (1878), 390 (1932), 391 (1938), 394 (1956)	22	daw	!u?	幽	112

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
戴	233 (1133)	1	day	!sj	ISJ	276
登	11 (52)	1	deng	t+ing	蒸	36
德	20 (96), 24 (118), 25 (120), 47 (232), 157 (746), 160 (761), 238 (1160), 252 (1228)	8	der	t+k	職	52
得	26 (129), 43 (213), 70 (339), 81 (394), 93 (446), 96 (460), 146 (689), 151 (721), 168 (807), 173 (830), 180 (865), 184 (888), 242 (1180), 268 (1311), 281 (1371), 381 (1889), 391 (1937)	17	der	t+k	職	66
地	5 (24), 104 (497), 109 (521), 161 (765), 190 (920), 220 (1069), 308 (1515)	7	dih	!rjajs ?	歌	19
弟	258 (1257)	1	dih	d+/ij?	微	314
定	120 (567), 121 (569), 153 (730), 179 (863), 270 (1320), 336 (1665), 390 (1935)	7	dinq	dengs	耕	167
冬	106 (508)	1	dong	tung	冬	156
動	348 (1725), 351 (1740)	2	donq	dong?	東	371
端	372 (1845)	1	duan	!sj	ISJ	356
度	184 (889), 318 (1569), 346 (1715)	3	duh	!aks	鐸	224
獨	366 (1811)	1	dwu	dok	屋	365
耳	87 (418), 122 (574), 181 (871), 231 (1120), 291 (1426)	5	eel	nj+?	之	163
二	321 (1583)	1	ell	sj	SJ	389

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
而	20 (92), 22 (104), 25 (122), 50 (244), 63 (304), 90 (432), 115 (546), 117 (554), 152 (723), 154 (732), 162 (771), 180 (867), 232 (1127), 234 (1137), 243 (1183), 269 (1313), 271 (1322), 277 (1350), 281 (1370), 284 (1388), 298 (1463), 339 (1676), 341 (1686), 345 (1705), 354 (1755), 357 (1771), 358 (1776), 360 (1783), 362 (1791), 365 (1808), 392 (1944)	31	erl	sj	SJ	70
發	241 (1173)	1	fa	pjat	月祭	312
反	35 (174), 243 (1185), 252 (1225), 335 (1658)	4	faan	pjan?	質	78
方	234 (1140)	1	fang	pjang	陽	288
凡	1 (1), 27 (131), 65 (313), 97 (465), 132 (619), 245 (1192), 306 (1504), 324 (1596), 337 (1667), 369 (1826)	10	fam	sj	SJ	2
煩	38 (188)	1	farn	!sj	!SJ	89
非	286 (1398)	1	fei	sj	SJ	142
忿	318 (1565)	1	fenn	!sj	!SJ	380
逢	226 (1096)	1	ferng	sj	SJ	281
廢	354 (1757)	1	fey	sj	SJ	369
膚	230 (1116), 256 (1247)	2	fu	prja	魚	252
復	51 (253)	1	fuh	b(r)juk	覺	109
父	265 (1292)	1	fuh	b(r)ja?	魚	297

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
夫	48 (234)	1	fwu	p(r)ja	魚	105
服	152 (726), 269 (1316)	2	fwu	bj+k	職	208
福	378 (1872)	1	fwu	pj+k	職	394
敢	357 (1772)	1	gaan	kam?	談	360
杲	10 (48)	1	gao	sj	SJ	33
根	98 (469)	1	gen	!sj	!SJ	181
鬼	6 (30), 285 (1392), 286 (1399)	3	goei	sj	SJ	21
公	155 (737)	1	gong	kong	東	209
官	166 (796), 167 (800), 195 (941), 197 (949)	4	guan	!sj	!SJ	222
歸	378 (1875)	1	guei	kWj+j	微	392
故	9 (44), 18 (81), 73 (354), 112 (537), 328 (1620)	5	guh	ka?(s)	魚	30
固	50 (248), 123 (582), 217 (1053), 248 (1208)	4	guh	kas	魚	107
過	133 (624), 267 (1307)	2	guoh	sj	SJ	213
果	26 (128)	1	guoo	sj	SJ	139
穀	3 (14)	1	guu	kok	屋	12

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
谷	108 (519)	1	guu	kok	屋	172
骨	232 (1128), 341 (1684)	2	guu	lsj	ISJ	273
鼓	262 (1278)	1	guu	ka?	魚	299
海	15 (70), 221 (1073)	2	hae	hm+?	之	42
浩	214 (1035)	1	haw	sj	SJ	271
害	227 (1103), 260 (1265), 364 (1802), 388 (1925), 395 (1961)	5	hay	Hkat(s)	月祭	253
和	39 (192), 214 (1037), 255 (1240), 310 (1526), 311 (1531), 312 (1536), 343 (1697)	7	her	sj	SJ	91
何	192 (927)	1	her	gaj	歌	248
迥	216 (1048)	1	her	lsj	ISJ	254
合	309 (1520)	1	her	gop	盞	328
后	120 (565), 204 (990), 205 (995), 206 (1000), 207 (1005)	5	how	g(r)o?	侯	405
乎	10 (49), 12 (57), 14 (65), 16 (73), 40 (199), 42 (208), 44 (217), 53 (261), 55 (269), 57 (278), 59 (287), 74 (357), 76 (368), 141 (667), 164 (781), 274 (1339), 275 (1343), 277 (1354), 278 (1358), 279 (1362), 281 (1374)	21	hu	ha	魚	34
呼	21 (100)	1	hu	hwa	魚	53
忽	42 (206), 42 (207)	2	hu	hmut	物	99

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
化	115 (548), 134 (632), 138 (647)	3	huah	!sj	!SJ	5
歡	370 (1835)	1	huan	!sj	!SJ	355
患	327 (1617)	1	huann	sj	SJ	385
洵	341 (1688)	1	huh	!sj	!SJ	377
惑	222 (1077)	1	huoh	!sj	!SJ	272
一	134 (629), 136 (638), 140 (659), 142 (670), 146 (690), 151 (719), 153 (728), 170 (815), 170 (817), 188 (907), 275 (1342), 290 (1421), 361 (1789), 384 (1902), 384 (1904)	15	i	?jit	質	214
音	22 (108), 54 (266), 79 (382), 80 (389), 203 (983), 204 (988)	6	in	?(r)+m	侵	118
因	72 (349)	1	in	sj	SJ	144
憂	31 (154), 33 (164), 294 (1444), 296 (1451), 327 (1616), 330 (1629), 371 (1837), 373 (1847)	8	iou	?(r)ju	幽	75
淵	13 (62), 215 (1043), 216 (1045)	3	iuau	?Win	真	39
日	102 (490)	1	iue	sj	SJ	195
照	164 (780)	1	jaw	tjaws	宵	203
者	48 (236), 82 (398), 125 (592), 126 (597), 198 (955), 199 (961)	6	jee	tjA?	魚	106
徵	314 (1546)	1	jeng	!sj	!SJ	349

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
正	90 (433), 103 (495), 118 (559), 156 (744), 160 (758), 183 (881), 229 (1112), 288 (1414), 315 (1551), 323 (1592), 325 (1605), 376 (1864)	12	jenq	tjengs	耕	198
九	191 (924), 219 (1060)	2	jeou	sj	SJ	242
折	40 (197), 40 (198)	2	jer	sj	SJ	94
稽	46 (225)	1	ji	sj	SJ	101
飢	346 (1711), 349 (1727), 353 (1749)	3	ji	krj+j	微	373
加	149 (708)	1	jia	kraj	歌	201
閒	5 (26), 342 (1693)	2	jian	kren	質	152
堅	123 (561), 248 (1206)	2	jian	kin	真	166
將	43 (211), 175 (841), 179 (861), 285 (1394), 301 (1478), 305 (1500), 336 (1663), 378 (1873), 390 (1933)	9	jiang	tsjang	陽	98
見	58 (281), 61 (295), 256 (1245), 313 (1543), 363 (1796), 364 (1801)	6	jiann	kens	質	123
鑿	235 (1142)	1	jiann	sj	SJ	289
解	188 (910), 192 (929)	2	jiee	sj	SJ	245
藉	380 (1883)	1	jieh	sj	SJ	397
既	251 (1220), 288 (1413), 289 (1418)	3	jih	sj	SJ	305

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
吉	277 (1352)	1	jih	kjit	質	352
紀	371 (1840)	1	jih	k(r)}+?	之	357
濟	35 (175)	1	jii	tsij?	脂	79
己	281 (1373)	1	jil	sj	SJ	347
筋	232 (1125)	1	jin	!sj	!SJ	270
精	1 (4), 124 (587), 125 (590), 126 (596), 175 (840), 176 (845), 179 (860), 210 (1017), 287 (1405), 307 (1513), 313 (1541), 344 (1700)	12	jing	!sj	!SJ	4
莖	98 (471)	1	jing	!sj	!SJ	180
近	292 (1434)	1	jinn	gj+n?	文	345
敬	23 (110), 174 (835), 178 (858), 237 (1152), 241 (1172), 332 (1644), 333 (1647), 334 (1655)	8	jinq	krjengs	耕	56
靜	67 (324), 80 (388), 105 (504), 119 (562), 158 (752), 229 (1113), 289 (1419), 333 (1650), 334 (1653), 375 (1859), 381 (1887), 389 (1930)	12	jinq	sj	SJ	150
俱	60 (291)	1	jiu	!sj	!SJ	132
懼	364 (1804)	1	jjuh	sj	SJ	358
君	141 (662), 143 (675), 144 (679)	3	jiun	kjun	文	219
中	7 (36), 121 (572), 147 (698), 158 (750), 165 (786), 168 (806), 183 (884), 201 (972), 222 (1075), 224 (1088), 253 (1233), 393 (1949)	12	jong	k-ljung	冬	25

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
州	191 (925)	1	jou	!sj	!SJ	241
周	246 (1196)	1	jou	tjiw	幽	309
諸	280 (1367)	1	ju	sj	SJ	321
屯	392 (1945)	1	juen	!sj	!SJ	402
主	103 (494), 104 (498), 105 (502)	3	juu	tjo?	侯	174
逐	250 (1215)	1	jwu	!sj	!SJ	306
之	1 (3), 5 (25), 6 (29), 8 (39), 27 (133), 30 (150), 36 (179), 64 (310), 78 (378), 83 (401), 85 (410), 87 (419), 91 (438), 94 (452), 102 (489), 107 (512), 109 (522), 111 (532), 126 (595), 132 (621), 135 (635), 137 (644), 140 (660), 146 (691), 155 (738), 163 (777), 171 (821), 172 (826), 173 (831), 176 (848), 177 (853), 180 (866), 188 (909), 192 (930), 198 (954), 199 (960), 201 (971), 202 (980), 216 (1046), 218 (1056), 228 (1106), 244 (1189), 261 (1272), 263 (1282), 281 (1372), 282 (1377), 282 (1379), 283 (1384), 284 (1387), 285 (1396), 286 (1401), 287 (1407), 298 (1462), 304 (1496), 306 (1506), 312 (1537), 318 (1567), 319 (1573), 324 (1598), 326 (1610), 337 (1669), 342 (1692), 344 (1701), 345 (1707), 346 (1713), 347 (1719), 369 (1828), 375 (1860), 376 (1865), 381 (1890), 382 (1895), 387 (1920), 391 (1939), 394 (1955)	74	iy	tj+	之	3
知	72 (351), 130 (612), 131 (614), 133 (625), 164 (782), 187 (904), 239 (1163), 251 (1221), 277 (1351), 293 (1439), 345 (1706)	11	iy	trje	支	151
枝	109 (523), 123 (580)	2	iy	kje	支	164
竭	218 (1058), 356 (1767)	2	iy	gjat	月祭	255

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
節	304 (1494), 320 (1576), 331 (1634), 394 (1953)	4	jye	tsik	質	333
智	25 (123), 137 (645), 139 (655)	3	jyh	!sj	!SJ	61
至	162 (773), 179 (862), 305 (1502)	3	jyh	tjits	質	205
治	147 (694), 148 (700), 149 (706), 150 (716), 159 (756), 173 (833), 177 (852), 194 (939), 195 (943), 198 (953), 207 (1006), 208 (1009), 316 (1556)	13	jyh	!rj+	之	210
致	303 (1492)	1	jyh	sj	SJ	334
極	45 (222), 163 (778), 190 (918), 240 (1170), 251 (1223), 287 (1408)	6	jyi	g(r)j+k	職	100
疾	262 (1275), 296 (1454), 297 (1456), 348 (1724), 351 (1739)	5	jyi	sj	SJ	300
執	140 (658), 142 (669), 389 (1929)	3	jyr	sj	SJ	218
止	19 (88), 68 (331), 131 (616), 278 (1357), 329 (1622)	5	jyy	tj+?	之	50
奇	362 (1794)	1	ke	!sj	!SJ	359
可	19 (87), 20 (93), 21 (99), 22 (105), 68 (330), 75 (362), 81 (393), 124 (584), 254 (1236), 380 (1882)	10	kee	khaj?	歌	47
口	83 (400), 148 (704)	2	koou	kh(r)o?	侯	162
枯	341 (1685)	1	ku	!sj	!SJ	374
寬	230 (1118), 247 (1201), 358 (1774), 365 (1806)	4	kuan	kWhan	質	256

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
廣	349 (1729), 353 (1751), 358 (1777)	3	kuang	!sj	!SJ	390
困	297 (1457), 299 (1468), 356 (1764)	3	kuenn	!sj	!SJ	341
來	52 (256), 157 (748), 170 (818), 175 (843), 379 (1880), 384 (1903)	6	lai	C-r+(k)	之	111
老	350 (1732), 355 (1759)	2	lao	C-ru?	幽	372
樂	31 (155), 33 (165), 331 (1635), 366 (1812)	4	leh	g-rawk	藥	76
雷	262 (1277)	1	lei	C-ruj	微	301
履	234 (1138)	1	leu	sj	SJ	290
離	71 (346)	1	li	C-rjai	歌	145
列	4 (18)	1	lieh	!sj	!SJ	14
力	19 (90), 286 (1402)	2	lih	C-rj+k	職	49
利	32 (160), 34 (170), 37 (182), 363 (1797)	4	lih	C-rjits	質	92
理	67 (326), 146 (692), 392 (1942)	3	lii	C-rj+?	之	149
禮	331 (1638), 332 (1641)	2	lii	C-rij?	脂	388
陵	108 (517)	1	ling	b-rj+ng	蒸	171
靈	383 (1897)	1	ling	C-reng	耕	398

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
流	5 (21)	1	liou	C-rju	幽	16
慮	350 (1735), 355 (1762)	2	liuh	sj	SJ	367
亂	38 (190), 166 (795), 167 (801), 172 (828), 208 (1011), 209 (1013), 376 (1863)	7	luann	C-rons	質	90
論	316 (1555)	1	luenn	sj	SJ	381
馬	201 (976)	1	maa	mra?	魚	404
滿	185 (892), 191 (923)	2	maan	!sj	ISJ	240
慢	294 (1441)	1	mann	mrans	質	340
渺	44 (215), 44 (216)	2	meau	!sj	ISJ	96
眇	76 (366), 76 (367)	2	meau	!sj	ISJ	153
密	246 (1198)	1	mih	mrjit	質	310
民	9 (45), 70 (338), 72 (348), 186 (898), 187 (901)	5	min	mjin	真	136
冥	57 (276), 57 (277)	2	ming	meng	耕	122
明	122 (577), 163 (776), 231 (1123), 236 (1150), 264 (1285)	5	ming	mrjang	陽	175
命	102 (488)	1	minq	mrjing(s)	真	176
莫	54 (263), 171 (820), 302 (1483), 303 (1489), 329 (1624), 330 (1630), 331 (1636), 332 (1642), 333 (1648)	9	moh	mak	鐸	117

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
末	352 (1747)	1	moh	lsj	ISJ	368
謀	53 (260), 111 (533), 380 (1885)	3	mou	mj+	之	120
目	85 (409), 122 (575), 181 (872), 231 (1121), 291 (1427)	5	muh	sj	SJ	161
母	265 (1293)	1	muu	m(r)ou+?	之	298
乃	35 (173), 39 (193), 56 (271), 68 (329), 81 (392), 128 (603), 129 (607), 130 (611), 131 (615), 195 (942), 197 (950), 209 (1014), 217 (1052), 220 (1065), 233 (1131), 297 (1458), 310 (1527), 319 (1571), 347 (1717), 356 (1765), 374 (1853)	21	nae	sj	SJ	93
淖	14 (64)	1	naw	lsj	ISJ	40
能	33 (162), 50 (247), 84 (405), 86 (414), 88 (423), 118 (558), 119 (561), 120 (566), 134 (631), 136 (640), 141 (664), 143 (674), 171 (822), 187 (903), 220 (1066), 229 (1111), 233 (1132), 274 (1337), 275 (1341), 276 (1345), 278 (1356), 279 (1360), 280 (1364), 335 (1657), 361 (1787), 389 (1928)	26	neng	n+(ng)	蒸	81
內	212 (1027), 242 (1179), 299 (1467), 334 (1652), 385 (1910)	5	ney	nups	緝	257
念	177 (851)	1	niann	sj	SJ	230
匿	254 (1238)	1	nih	lsj	ISJ	303
寧	37 (185), 177 (850)	2	ning	neng	耕	88
怒	32 (158), 34 (168), 110 (527), 318 (1566), 322 (1589), 327 (1615), 329 (1623), 372 (1842), 373 (1850)	9	nuh	nas V na?	魚	85

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
蟠	191 (922)	1	parn	!sj	!SJ	239
普	186 (896)	1	puu	!sj	!SJ	244
皮	230 (1115)	1	pyi	b(r)jaj	歌	285
平	104 (499), 214 (1038), 315 (1550), 323 (1591), 325 (1604)	5	pyng	brjeng	耕	199
然	120 (564), 150 (712), 162 (770), 204 (989), 205 (994), 206 (999), 207 (1004), 214 (1036), 243 (1182)	9	ran	njan	質	168
人	8 (41), 50 (245), 91 (437), 105 (501), 111 (531), 113 (540), 149 (710), 227 (1102), 228 (1108), 229 (1110), 257 (1253), 259 (1263), 280 (1368), 306 (1505), 310 (1525), 324 (1597), 369 (1827), 391 (1940)	18	ren	njin	真	28
仁	161 (764), 365 (1809)	2	ren	njin	真	206
榮	99 (476), 211 (1025)	2	rong	!sj	!SJ	179
容	178 (856), 255 (1243)	2	rong	(l)jong	東	228
戎	260 (1267)	1	rong	njung	冬	313
如	11 (51), 13 (59), 15 (67), 17 (75), 41 (201), 43 (210), 45 (219), 75 (361), 77 (371), 272 (1329)	10	ru	sj	SJ	35
入	13 (60)	1	ruh	njup	緝	38
若	292 (1433), 302 (1484), 303 (1490), 329 (1625), 330 (1631), 331 (1637), 332 (1643), 333 (1649)	8	ruoh	njak	鐸	335
日	47 (229), 238 (1157), 264 (1287)	3	ryh	njit	質	103

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
色	256 (1248)	1	seh	srj+k	職	302
賞	266 (1295)	1	shaang	!sj	ISJ	295
山	108 (516)	1	shan	srjan	質	157
傷	339 (1675)	1	shang	hljang	陽	375
善	66 (318), 249 (1211), 257 (1250), 266 (1300)	4	shann	sj	SJ	148
擅	315 (1552), 323 (1593)	2	shann	!sj	ISJ	378
上	4 (16), 189 (912)	2	shang	djangs	陽	13
想	176 (846)	1	sheang	!sj	ISJ	231
捨	180 (869), 298 (1465)	2	shee	hlJA(k)?	魚	226
舍	52 (258), 124 (588), 174 (838), 249 (1213), 301 (1480), 344 (1703)	6	sheh	sj	SJ	121
攝	160 (760), 340 (1682), 342 (1691)	3	sheh	sj	SJ	207
身	169 (813), 366 (1814)	2	shen	hljin	真	247
生	2 (9), 3 (12), 29 (142), 60 (292), 93 (448), 100 (481), 128 (604), 129 (606), 133 (627), 210 (1020), 244 (1188), 293 (1438), 294 (1443), 295 (1448), 296 (1453), 301 (1477), 306 (1507), 310 (1528), 311 (1533), 324 (1599), 345 (1709), 369 (1829)	22	sheng	srjeng	耕	9
聲	21 (102), 62 (302), 79 (384), 261 (1273)	4	sheng	xjeng	耕	54

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
慎	237 (1153)	1	shenn	sj	SJ	267
聖	8 (40), 113 (539), 228 (1107)	3	shenq	sj	SJ	26
神	6 (31), 135 (636), 163 (775), 169 (810), 272 (1330), 285 (1393), 286 (1400)	7	shern	ljin	真	22
下	3 (11), 150 (715), 152 (725), 154 (734), 185 (894), 190 (917), 239 (1165), 269 (1315), 271 (1324)	9	shiah	gra?	魚	11
夏	106 (509)	1	shiah	g/Hra?	魚	158
先	203 (985)	1	shian	sj	SJ	250
泄	392 (1946)	1	shieh	sj	SJ	401
細	385 (1908)	1	shih	lsj	ISJ	400
喜	32 (157), 34 (167), 110 (526), 322 (1587), 327 (1614), 373 (1849)	6	shii	x(r)j+?	之	82
心	27 (132), 35 (172), 36 (178), 56 (274), 66 (319), 67 (323), 80 (387), 89 (430), 121 (570), 132 (620), 147 (695), 159 (754), 167 (802), 182 (876), 183 (882), 193 (934), 194 (938), 196 (946), 198 (956), 199 (962), 200 (965), 200 (968), 201 (970), 201 (975), 202 (979), 202 (981), 224 (1085), 253 (1231), 263 (1280), 270 (1318), 290 (1424), 316 (1558), 357 (1770), 383 (1900), 389 (1927)	35	shin	sj+m	侵	63
新	238 (1158)	1	shin	sjin	真	261
星	4 (19)	1	shing	seng	耕	15
信	232 (1126)	1	shinn	snjins^hnjin	真	291

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
性	335 (1660), 336 (1662)	2	shinq	sj	SJ	383
胃	7 (35)	1	shiong	!sj	!SJ	135
兄	258 (1258)	1	shiong	hwrjang	陽	316
凶	277 (1353), 321 (1584)	2	shiong	x(r)jong	東	322
匈	315 (1553), 323 (1594), 393 (1948)	3	shiong	!sj	!SJ	386
修	80 (386), 89 (429)	2	shiou	sljiw	幽	192
血	289 (1416), 341 (1687)	2	shiuoh	hwit	質	346
序	63 (305)	1	shiuoh	sj	SJ	130
巽	301 (1479)	1	shiunn	!sj	!SJ	338
守	23 (111), 165 (788), 249 (1210), 332 (1640), 333 (1646), 361 (1788)	6	shoou	sj	SJ	57
壽	317 (1563)	1	show	dju?	幽	379
舒	247 (1203), 365 (1807)	2	shu	hlja	魚	311
失	23 (113), 30 (149), 92 (441), 95 (455), 133 (626), 142 (672), 172 (825), 318 (1568), 326 (1609), 346 (1714), 371 (1839), 372 (1844), 382 (1894), 387 (1919)	14	shy	sj	SJ	59
詩	329 (1626)	1	shy	stj+	之	387

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
邪	223 (1082)	1	shye	z(ng)jA	魚	279
是	9 (43), 18 (80), 24 (115), 73 (353), 112 (536), 168 (804), 242 (1177), 328 (1619), 367 (1816)	9	shyh	sj	SJ	29
事	94 (451), 136 (639), 149 (707)	3	shyh	hsrj+?(s)	之	183
視	86 (415), 236 (1147)	2	shyh	gjij?/s	脂	184
筮	276 (1348)	1	shyh	sj	SJ	323
適	304 (1495)	1	shyh	stjek	錫	332
逝	384 (1905)	1	shyh	sj	SJ	399
刑	27 (134), 267 (1302)	2	shyng	geng	耕	69
形	49 (241), 58 (283), 61 (297), 90 (434), 132 (622), 156 (742), 160 (759), 204 (991), 205 (993), 225 (1090), 255 (1242), 263 (1283), 308 (1518), 339 (1677), 359 (1780)	15	shyng	geng	耕	124
行	368 (1822)	1	shyng	grangs	陽	391
時	107 (513), 114 (543)	2	shyr	dj+(?)	之	173
食	302 (1482), 337 (1668)	2	shyr	Lj+k	職	330
使	144 (681), 145 (687), 206 (1001), 207 (1003)	4	shyy	srj+?	之	221
雖	292 (1431)	1	suei	sj	SJ	344

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
遂	219 (1062)	1	suey	zuts	物	260
遽	356 (1766)	1	suh	tsj	ISJ	370
所	30 (147), 49 (238), 65 (316), 77 (374), 83 (402), 85 (411), 87 (420), 89 (427), 91 (439), 93 (445), 94 (453), 96 (459), 186 (899), 326 (1607), 344 (1702), 345 (1708), 387 (1917)	17	suoo	s(k)rja?	魚	74
索	75 (364), 293 (1437)	2	suoo	sj	SJ	143
思	129 (608), 130 (610), 171 (823), 176 (847), 282 (1376), 282 (1378), 283 (1383), 284 (1386), 293 (1436), 298 (1461), 303 (1488), 349 (1730), 353 (1752)	13	sy	sj+	之	236
四	123 (579), 217 (1050), 221 (1072), 240 (1169), 288 (1411), 352 (1746)	6	syh	s(p)ij/ts	質	234
似	368 (1823)	1	syh	zlj+?	之	363
死	92 (443), 209 (1015), 297 (1459)	3	syy	sijj?	脂	160
他	182 (878)	1	ta	hlaj	歌	227
忒	165 (790), 237 (1155), 244 (1190)	3	teh	hl+k	職	223
天	5 (23), 11 (54), 103 (493), 107 (511), 150 (714), 152 (724), 154 (733), 161 (763), 185 (893), 189 (915), 220 (1068), 226 (1097), 239 (1164), 269 (1314), 271 (1323), 307 (1510), 368 (1824)	17	tian	hlin	真	18
體	217 (1051), 288 (1412)	2	tii	hrij?	脂	284
聽	88 (424), 154 (735), 271 (1325)	3	ting	hleng	耕	182

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
通	219 (1063), 284 (1390), 285 (1395), 352 (1744)	4	tong	lsj	ISJ	266
藏	7 (33), 200 (967), 212 (1028)	3	tsarng	htshang/hsrang	陽	23
臧	339 (1679)	1	tsarng	sj	SJ	376
側	41 (204)	1	tseh	tsrj+k	職	95
聰	122 (576), 231 (1122)	2	tsong	tshong	東	186
從	116 (550)	1	tsorng	dzjong	東	185
存	210 (1018), 273 (1335)	2	tswen	dz+n	文	251
此	2 (6), 18 (82), 46 (224), 141 (666), 244 (1187), 309 (1521), 317 (1560), 343 (1695)	8	tsyy	sj	ISJ	31
推	377 (1870)	1	tuei	thuj	微	393
圖	182 (879), 300 (1475), 319 (1574), 347 (1720)	4	twu	d/la	魚	225
畱	223 (1083), 226 (1098)	2	tzai	sj	SJ	278
蚤	300 (1473)	1	tzao	tsu?	幽	336
躁	382 (1892), 388 (1923)	2	tzaw	lsj	ISJ	396
在	15 (68), 17 (76), 41 (202), 56 (272), 121 (571), 147 (696), 169 (812), 183 (883), 186 (897), 193 (932), 253 (1232), 316 (1557), 383 (1899)	13	tzay	dz+?	之	41

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
則	2 (7), 150 (713), 162 (768), 348 (1723), 349 (1728), 350 (1733), 371 (1838), 372 (1843), 381 (1888), 382 (1893)	10	tzer	ts+k	職	6
澤	250 (1217)	1	tzer	lrak	鐸	308
卒	16 (72), 55 (268), 74 (356)	3	tzwu	Stjut	物	137
足	266 (1297), 267 (1304)	2	tzwu	tsjok	屋	294
自	28 (136), 28 (138), 29 (141), 29 (143), 39 (194), 162 (772), 169 (811), 175 (842), 210 (1019), 305 (1501), 378 (1874), 379 (1879), 390 (1934)	13	tzyh	sj	SJ	65
子	141 (663), 144 (680)	2	tzyy	tsj+?	之	220
惡	79 (381)	1	u	sj	SJ	155
萬	26 (126), 100 (478), 101 (483), 143 (676), 164 (783), 184 (886), 273 (1332), 362 (1793), 395 (1958)	9	wann	sj	SJ	64
外	211 (1023), 223 (1080), 225 (1093), 299 (1469), 334 (1654), 386 (1915)	6	way	ngWats	月祭	282
爲	4 (17), 124 (586), 141 (665), 145 (685), 213 (1031), 215 (1041), 300 (1474), 309 (1523), 319 (1572), 347 (1718), 388 (1924)	11	wei	w(r)aj	歌	8
惟	140 (657)	1	wei	wij	脂	216
聞	54 (264), 62 (300)	2	wen	mjun	文	119
爲	2 (8)	1	wey	w(r)ajs	歌	7
謂	6 (28), 8 (38), 24 (116), 64 (309), 135 (634), 137 (643), 155 (739), 168 (805), 192 (928), 228 (1105), 242 (1178), 343 (1696), 367 (1817)	13	wey	wj+ts	物	20

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
畏	178 (857)	1	wey	?juj(s)	微	229
往	51 (251), 170 (816)	2	woang	wjang?	陽	108
我	60 (290), 194 (937), 196 (945)	3	woo	ngaj?	歌	131
無	45 (221), 65 (315), 77 (373), 98 (468), 98 (470), 99 (473), 99 (475), 182 (877), 222 (1076), 223 (1081), 237 (1154), 276 (1346), 302 (1485), 374 (1854), 385 (1909), 386 (1914), 393 (1950)	17	wu	sj	SJ	110
物	1 (2), 26 (127), 100 (479), 101 (484), 116 (551), 134 (630), 143 (677), 144 (682), 145 (686), 164 (784), 166 (794), 164 (887), 273 (1333), 395 (1959)	14	wuh	sj	SJ	1
勿	23 (112), 38 (187), 38 (189), 180 (868), 249 (1212), 280 (1365), 303 (1491), 377 (1867), 377 (1869)	9	wuh	sj	SJ	58
惡	259 (1260)	1	wuh	?aks	鐸	154
五	3 (13), 320 (1578)	2	wuu	nga?	魚	10
言	84 (406), 148 (701), 151 (720), 153 (729), 188 (908), 203 (986), 205 (995), 206 (998), 261 (1271)	9	yan	ngyan	質	188
嚴	178 (855)	1	yan	ng(r)jam	談	232
杏	12 (56)	1	yao	lsj	ISJ	37
也	18 (84), 49 (242), 82 (397), 84 (407), 86 (416), 88 (425), 90 (435), 93 (449), 96 (463), 107 (514), 109 (524), 111 (534), 125 (591), 126 (598), 155 (740), 187 (905), 198 (957), 199 (963), 286 (1403), 287 (1409), 306 (1508), 324 (1600), 369 (1830)	23	yee	sj	SJ	45
葉	99 (474)	1	yeh	ljap	盍	178

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
有	169 (809), 201 (974)	2	yeou	wj+?	之	246
與	60 (289), 75 (363), 79 (383), 114 (542), 380 (1884)	5	yeu	lja?	魚	129
予	110 (529)	1	yeu	lja?	魚	194
遠	46 (227), 69 (336), 292 (1432)	3	yeuan	wjan?	質	102
移	117 (556), 360 (1785)	2	yi	lsj	ISJ	165
意	222 (1078), 268 (1310), 270 (1319), 290 (1422), 368 (1821)	5	yih	?(r)j+ks	職	71
義	161 (766), 165 (787)	2	yih	sj	SJ	204
易	138 (649), 139 (654), 294 (1442)	3	yih	ljek[s]	錫	215
以	19 (89), 20 (95), 21 (101), 22 (107), 30 (148), 31 (153), 37 (184), 49 (239), 70 (340), 72 (350), 89 (428), 92 (442), 93 (447), 95 (456), 96 (461), 100 (480), 101 (485), 124 (585), 166 (793), 167 (799), 200 (966), 203 (984), 213 (1030), 215 (1040), 266 (1298), 267 (1305), 309 (1522), 317 (1561), 325 (1603), 326 (1608), 327 (1613), 370 (1833), 387 (1918), 388 (1922)	34	yii	lj+?	之	48
已	17 (78), 279 (1361)	2	yii	lj+?	之	138
矣	131 (617), 150 (717)	2	yii	hj+?	之	212
引	377 (1868)	1	yiin	ljin?	真	395
淫	250 (1216), 291 (1429)	2	yn	sj	SJ	127

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
淫	59 (285), 59 (286), 162 (769), 181 (874)	4	yn	sj	SJ	407
迎	22 (106), 257 (1252), 259 (1262)	3	ying	sj	SJ	55
盈	28 (139)	1	ying	(l)jeng	耕	72
用	47 (230)	1	yonq	ljongs	東	104
又	201 (973), 283 (1381)	2	yow	wj+(k)s	職	249
誘	363 (1799)	1	yow	lju?	幽	364
於	5 (22), 7 (34), 11 (53), 13 (61), 15 (69), 17 (77), 41 (203), 56 (273), 147 (697), 148 (703), 149 (709), 189 (914), 190 (919), 193 (933), 224 (1087), 225 (1092), 235 (1143), 236 (1148), 240 (1168), 252 (1226), 255 (1241), 256 (1246), 258 (1256), 260 (1266), 262 (1276), 264 (1286), 265 (1291), 352 (1745)	28	yu	sj	SJ	17
原	213 (1033)	1	yuan	ngWjan	質	263
園	233 (1135)	1	yuan	lsj	!SJ	264
怨	295 (1449)	1	yuann	?jons	質	342
月	264 (1288)	1	yueh	ngWjat	月祭	141
樂	330 (1632)	1	yueh	sj	SJ	384
欲	32 (159), 34 (169), 320 (1579), 394 (1954)	4	yuh	sj	SJ	83

Graph	Listings	Mfreq	GR	OC	RhymeGroup	MNum
慾	375 (1858)	1	yuh	lsj	!SJ	84
裕	230 (1117)	1	yuh	ljoks	屋	262
遇	227 (1101), 376 (1862)	2	yuh	sj	SJ	265
鬱	296 (1452)	1	yuh	sj	SJ	353
雲	367 (1818)	1	yun	wj+n	文	362

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Morph1	Morph2	GrString	OCString	Location	Freq
安	心	an shin	?an sj+m	66 (320), 193 (935),	2
愛	靜	ay jinq	?+ts sj	66 (321), 375 (1857),	2
飽	疾	hao jyi	pru? sj	348 (1722), 351 (1737),	2
必	必	bih bih	sj sj	246 (1195), 246 (1197), 247 (1200), 247 (1202), 248 (1205),	5
彼	不	bii buh	sj sj	69 (333), 71 (343),	2
彼	之	bii jy	sj tj+	36 (177), 202 (978),	2
彼	自	bii tzyh	sj sj	305 (1499), 379 (1877),	2
不	不	buh buh	sj sj	165 (789), 311 (1530), 322 (1586),	3
不	其	buh chyí	sj sj	51 (252), 58 (280), 61 (294), 62 (299), 313 (1542),	5
不	民	buh min	sj mjín	69 (335), 71 (345),	2
不	能	buh neng	sj n+(ng)	117 (555), 142 (671), 360 (1784),	3

Morph1	Morph2	GrString	OCString	Location	Freq
不	平	buh pyng	sj brjeng	314 (1547), 322 (1588),	2
不	心	buh shin	sj sj+m	158 (751), 181 (873),	2
不	物	buh wuh	sj sj	145 (684), 166 (792),	2
不	以	buh yii	sj lj+?	266 (1296), 267 (1303),	2
成	之	cherng jy	djeng tj+	63 (307), 101 (486), 343 (1698),	3
氣	不	chih buh	!sj sj	18 (83), 138 (650),	2
氣	人	chih ren	!sj njin	257 (1251), 259 (1261),	2
其	安	chyi an	sj ?an	211 (1022), 359 (1779),	2
其	不	chyi buh	sj sj	51 (250), 52 (255), 61 (296), 313 (1540), 314 (1545),	5
其	是	chyi shyh	sj sj	241 (1174), 366 (1813),	2
其	無	chyi wu	sj sj	385 (1907), 386 (1912),	2

Morph1	Morph2	GrString	OCString	Location	Freq
大	而	dah erl	lats sj	233 (1134), 357 (1769),	2
道	可	daw kee	lu? khaj?	68 (328), 81 (391),	2
道	所	daw suoo	lu? s(k)rja?	48 (235), 65 (314),	2
得	而	der erl	t+k sj	180 (865), 242 (1180),	2
得	之	der jy	t+k tj+	146 (689), 391 (1937),	2
得	天	der tian	t+k hiin	151 (721), 268 (1311),	2
定	天	dinq tian	dengs hlin	153 (730), 270 (1320),	2
度	為	duh wei	laks w(r)jaj	318 (1569), 346 (1715),	2
耳	不	eel buh	nj+? sj	181 (871), 291 (1426),	2
耳	聽	eel tsong	nj+? tshong	122 (574), 231 (1120),	2
而	不	erl buh	sj sj	50 (244), 339 (1676),	2

Morph1	Morph2	GrString	OCString	Location	Freq
而	其	erl chyí	sj sj	63 (304), 358 (1776),	2
而	之	erl jy	sj tʃ+	281 (1370), 345 (1705),	2
而	捨	erl shee	sj hʃA(k)?	180 (867), 298 (1463),	2
而	下	erl shiah	sj gra?	152 (723), 154 (732), 269 (1313), 271 (1322),	4
而	移	erl yi	sj lʃj	117 (554), 360 (1783),	2
凡	之	fam jy	sj tʃ+	1 (1), 27 (131), 132 (619), 306 (1504), 324 (1596), 337 (1667), 369 (1826),	7
凡	無	fam wu	sj sj	65 (313), 97 (465),	2
故	氣	guh chih	ka?(s) lʃj	9 (44), 18 (81),	2
和	生	her sheng	sj sɾjeng	310 (1526), 311 (1531),	2
乎	一	hu i	ha ʔjit	141 (667), 274 (1339),	2
乎	如	hu ru	ha sj	74 (357), 76 (368),	2

Morph1	Morph2	GrString	OCString	Location	Freq
乎	在	hu tzay	ha dz+?	14 (65), 16 (73), 40 (199), 55 (269),	4
一	一	ii	?jit ?jit	170 (815), 384 (1902),	2
一	能	i neng	?jit n+(ng)	134 (629), 136 (638), 275 (1342),	3
憂	喜	iou shii	?(r)ju x(r)j+?	31 (154), 33 (164), 373 (1847),	3
者	之	jee jy	tjA? tj+	82 (398), 125 (592),	2
者	也	jee yee	tjA? sj	198 (955), 199 (961).	2
正	勾	jenq shiong	tjengs !sj	315 (1551), 323 (1592),	2
飢	廣	ji kuanq	krj+j !sj	349 (1727), 353 (1749),	2
將	定	jiang ding	tsjang dengs	179 (861), 336 (1663), 390 (1933),	3
見	不	jiann buh	kens sj	363 (1796), 364 (1801),	2
見	形	jiann shyng	kens geng	58 (281), 61 (295),	2

Morph1	Morph2	GrString	OCString	Location	Freq
精	自	jing tzyh	!sj sj	175 (840), 210 (1017),	2
敬	其	jinq chyi	krjengs sj	174 (835), 241 (1172),	2
中	有	jong yeou	k-ljung wj+?	168 (806), 201 (972),	2
之	不	jy buh	tj+ sj	83 (401), 85 (410), 87 (419), 284 (1387), 298 (1462),	5
之	度	jy duh	tj+ laks	318 (1567), 346 (1713),	2
之	凡	jy fam	tj+ sj	64 (310), 244 (1189),	2
之	之	jy jy	tj+ tj+	282 (1377), 283 (1384),	2
之	治	jy jyh	tj+ l+j+	146 (691), 173 (831),	2
之	亂	jy luann	tj+ C-rons	172 (826), 375 (1860),	2
之	人	jy ren	tj+ njin	8 (39), 228 (1106),	2
之	心	jy shin	tj+ sj+m	198 (954), 199 (960),	2

Morph1	Morph2	GrString	OCString	Location	Freq
之	失	jy shy	tj+ sj	91 (438), 94 (452),	2
之	此	jy tsyy	tj+ sj	1 (3), 342 (1692),	2
之	也	jy yee	tj+ sj	107 (512), 109 (522), 111 (532), 155 (738), 286 (1401), 287 (1407), 306 (1506), 324 (1598), 369 (1828),	9
之	以	jy yii	tj+ lj+?	30 (150), 326 (1610),	2
節	之	jye jy	tsik tj+	304 (1494), 394 (1953),	2
治	心	jyh shin	lrj+ sj+m	195 (943), 316 (1556),	2
可	以	kee yii	khaj? lj+?	19 (87), 20 (93), 21 (99), 22 (105),	4
寬	而	kuan erl	kWhan sj	358 (1774), 365 (1806),	2
老	長	lao chamg	C-ru? Htrjang	350 (1732), 355 (1759),	2
樂	怒	leh nuh	g-rawk nas V na?	31 (155), 33 (165),	2
亂	之	luann jy	C-rons tj+	172 (828), 376 (1863),	2

Morph1	Morph2	GrString	OCString	Location	Freq
亂	乃	luann nae	C-rons sj	38 (190), 208 (1011),	2
民	以	min yii	mjin lj+?	70 (338), 72 (348),	2
目	明	muh ming	sj nrjang	122 (575), 231 (1121),	2
乃	之	nae jy	sj tj+	319 (1571), 347 (1717),	2
乃	思	nae sy	sj sj+	129 (607), 297 (1458),	2
能	其	neng chyí	n+(ng) sj	50 (247), 335 (1657),	2
能	乎	neng hu	n+(ng) ha	274 (1337), 275 (1341), 278 (1356), 279 (1360),	4
能	靜	neng jinq	n+(ng) sj	229 (1111), 389 (1928),	2
能	謂	neng wey	n+(ng) wj+ts	134 (631), 136 (640),	2
能	也	neng yce	n+(ng) sj	84 (405), 86 (414), 88 (423), 187 (903),	4
內	外	ney way	nups ngWats	299 (1467), 334 (1652),	2

Morph1	Morph2	GrString	OCString	Location	Freq
怒	利	nuh lih	nas V na? C-rjits	32 (158), 34 (168),	2
怒	失	nuh shy	nas V na? sj	318 (1566), 372 (1842),	2
平	擅	pyng shann	brjeng !sj	315 (1550), 323 (1591),	2
人	能	ren neng	njin n+(ng)	50 (245), 228 (1108),	2
人	生	ren sheng	njin srjeng	306 (1505), 324 (1597), 369 (1827),	3
人	於	ren yu	njin sj	257 (1253), 259 (1263),	2
如	無	ru wu	sj sj	45 (219), 77 (371),	2
如	於	ru yu	sj sj	11 (51), 13 (59), 15 (67), 17 (75), 41 (201),	5
若	守	ruoh shoou	njak sj	331 (1637), 332 (1643),	2
日	其	ryh chyi	njit sj	47 (229), 238 (1157),	2
生	必	sheng bih	srjeng sj	324 (1599), 369 (1829),	2

Morph1	Morph2	GrString	OCString	Location	Freq
生	和	sheng her	srjeng sj	310 (1528), 311 (1533),	2
生	物	sheng wuh	srjeng sj	100 (481), 133 (627),	2
下	於	shiah yu	gra? sj	190 (917), 239 (1165),	2
喜	欲	shii yuh	x(r)j+? sj	32 (157), 34 (167),	2
心	官	shin guan	sj+m !sj	194 (938), 196 (946),	2
心	中	shin jong	sj+m k-ljung	121 (570), 183 (882), 201 (970), 253 (1231),	4
心	之	shin jy	sj+m tj+	200 (968), 263 (1280),	2
心	心	shin shin	sj+m sj+m	199 (962), 202 (979),	2
心	以	shin yii	sj+m lj+?	202 (981), 316 (1558),	2
心	於	shin yu	sj+m sj	147 (695), 224 (1085),	2
守	莫	shoou moh	sj mak	332 (1640), 333 (1646),	2

Morph1	Morph2	GrString	OCString	Location	Freq
失	必	shy bih	sj sj	30 (149), 172 (825), 326 (1609),	3
失	乃	shy nae	sj sj	318 (1568), 346 (1714),	2
形	而	shyng eri	geng sj	49 (241), 359 (1780),	2
形	於	shyng yu	geng sj	225 (1090), 263 (1283),	2
所	能	suoo neng	s(k)rja? n+(ng)	83 (402), 85 (411), 87 (420),	3
所	失	suoo shy	s(k)rja? sj	30 (147), 326 (1607), 387 (1917),	3
所	以	suoo yii	s(k)rja? lj+?	91 (439), 93 (445), 94 (453), 96 (459),	4
思	而	sy eri	sj+ sj	284 (1386), 298 (1461), 353 (1752),	3
思	思	sy sy	sj+ sj+	282 (1376), 283 (1383),	2
天	服	tian fwu	hlin bj+k	152 (724), 269 (1314),	2
天	聽	tian ting	hlin hieng	154 (733), 271 (1323),	2

Morph1	Morph2	GrString	OCString	Location	Freq
在	一	tzay i	dz+? ?jit	169 (812), 383 (1899),	2
在	心	tzay shin	dz+? sj+m	56 (272), 193 (932),	2
則	之	tzer jy	ts+k tj+	381 (1888), 382 (1893),	2
自	其	tzyh chyí	sj sj	29 (143), 210 (1019),	2
自	自	tzyh tzyh	sj sj	28 (136), 28 (138), 29 (141),	3
萬	以	wann yí	sj lj+?	100 (478), 101 (483),	2
爲	圖	wei twu	w(r)jaj d/la	319 (1572), 347 (1718),	2
謂	得	wey der	wj+ts t+k	168 (805), 242 (1178),	2
謂	聖	wey shenq	wj+ts sj	8 (38), 228 (1105),	2
無	無	wu wu	sj sj	98 (468), 98 (470), 99 (473),	3
物	得	wuh der	sj t+k	26 (127), 145 (686),	2

Morph1	Morph2	GrString	OCString	Location	Freq
勿	勿	wuh wuh	sj sj	38 (187), 377 (1867),	2
言	而	yan erl	ngyan sj	151 (720), 153 (729),	2
言	然	yan ran	ngyan njan	203 (986), 205 (996),	2
也	氣	yee chih	sj tsj	125 (591), 286 (1403),	2
也	道	yee daw	sj lu?	96 (463), 126 (598),	2
也	之	yee jy	sj tj+	84 (407), 86 (416), 90 (435), 93 (449), 198 (957),	5
也	以	yee yii	sj lj+?	88 (425), 199 (963), 324 (1600), 369 (1830),	4
意	而	yih erl	?(r)j+ks sj	268 (1310), 270 (1319),	2
以	而	yii erl	lj+? sj	19 (89), 21 (101),	2
以	之	yii jy	lj+? tj+	30 (148), 326 (1608), 387 (1918),	3
以	亂	yii luann	lj+? C-rons	166 (793), 167 (799),	2

Morph1	Morph2	GrString	OCString	Location	Freq
以	心	yii shin	lj+?sj+m	89 (428), 200 (966),	2
以	所	yii suoo	lj+?s(k)rja?	92 (442), 95 (456),	2
以	也	yii yee	lj+?sj	93 (447), 96 (461),	2
於	治	yu jyh	sj lrj+	147 (697), 148 (703),	2

Pattern matching - 2 word Couples

Morph1	Morph2	GrString	OCString	Location	Freq
安	以	an yii	?an lj+?	20 (94), 37 (183),	2
必	亂	bih luann	sj C-rons	172 (827), 208 (1010),	2
必	以	bih yii	sj lj+?	31 (152), 325 (1602), 327 (1612), 370 (1832),	4
彼	道	bii daw	sj lu?	69 (333), 71 (343), 379 (1877),	3
彼	心	bii shin	sj sj+m	36 (177), 202 (978),	2
不	見	buh jiann	sj kens	58 (280), 61 (294), 313 (1542),	3
不	治	buh jyh	sj lrj+	159 (755), 208 (1008),	2
不	可	buh kee	sj khaj?	19 (86), 21 (98), 254 (1235),	3
不	能	buh neng	sj n+(ng)	50 (246), 84 (404), 86 (413), 88 (422), 187 (902),	5
不	通	buh tong	sj lsj	284 (1389), 352 (1743),	2
不	足	buh tzwu	sj tsjok	266 (1296), 267 (1303),	2

Morph1	Morph2	GrString	OCString	Location	Freq
不	遠	buh yeuan	sj wjan?	46 (226), 69 (335),	2
不	移	buh yi	sj !sj	117 (555), 360 (1784),	2
不	易	buh yih	sj ljek[s]	138 (648), 139 (653),	2
不	以	buh yii	sj lj+?	166 (792), 167 (798),	2
察	於	char yu	!sj sj	189 (913), 265 (1290),	2
長	慮	chang liuh	Hrjang sj	350 (1734), 355 (1761),	2
氣	之	chih jy	!sj tj+	126 (594), 263 (1281), 287 (1406),	3
氣	意	chih yih	!sj ?(r)j+ks	268 (1309), 367 (1819),	2
氣	迎	chih yng	!sj sj	257 (1251), 259 (1261),	2
去	憂	chuh iou	kh(r)jas ?(r)ju	33 (163), 330 (1628),	2
出	其	chu chyi	thjut sj	307 (1511), 308 (1516),	2

Morph1	Morph2	GrString	OCString	Location	Freq
其	德	chyi der	sj t+k	47 (231), 238 (1159),	2
其	精	chyi jing	sj lsj	307 (1512), 313 (1540),	2
其	如	chyi ru	sj sj	75 (360), 77 (370),	2
其	形	chyi shyng	sj geng	58 (282), 61 (296), 308 (1517), 359 (1779),	4
窮	無	chyong wu	g(r)jung sj	45 (220), 77 (372),	2
全	於	chyuan yu	lsj sj	224 (1086), 225 (1091),	2
道	不	daw buh	lu? sj	69 (334), 71 (344),	2
道	之	daw jy	lu? tj+	78 (377), 391 (1938),	2
道	乃	daw nae	lu? sj	68 (328), 81 (391), 128 (602), 374 (1852),	4
道	無	daw wu	lu? sj	65 (314), 97 (466),	2
德	不	der buh	t+k sj	20 (96), 157 (746),	2

Morph1	Morph2	GrString	OCString	Location	Freq
得·	道	der daw	t+k lu?	81 (394), 391 (1937),	2
得·	而	der erl	t+k sj	151 (721), 268 (1311),	2
得·	之	der jy	t+k tj+	173 (830), 180 (865), 281 (1371), 381 (1889),	4
得·	以	der yii	t+k lj+?	70 (339), 93 (446), 96 (460),	3
地	之	dih jy	lrjajs ? tj+	5 (24), 109 (521),	2
定	得·	dinq der	dengs t+k	179 (863), 390 (1935),	2
定	而	dinq erl	dengs sj	153 (730), 270 (1320),	2
度	乃	duh nae	laks sj	318 (1569), 346 (1715),	2
耳	目	eel muh	nj+? sj	122 (574), 181 (871), 231 (1120), 291 (1426),	4
而	不	erl buh	sj sj	115 (546), 117 (554), 243 (1183), 284 (1388), 298 (1463), 354 (1755), 360 (1783),	7
而	知	erl jy	sj trje	277 (1350), 345 (1705),	2

Morph1	Morph2	GrString	OCString	Location	Freq
而	可	erl kee	sj khaj?	20 (92), 22 (104),	2
而	天	erl tian	sj hlin	152 (723), 154 (732), 269 (1313), 271 (1322),	4
凡	道	farn daw	sj lu?	65 (313), 97 (465), 245 (1192),	3
凡	人	farn ren	sj njin	306 (1504), 324 (1596), 369 (1826),	3
凡	心	farn shin	sj sj+m	27 (131), 132 (619),	2
鬼	神	goei shem	sj Ljin	6 (30), 285 (1392), 286 (1399),	3
官	乃	guan nae	tsj sj	195 (941), 197 (949),	2
和	乃	her nae	sj sj	39 (192), 310 (1526),	2
乎	其	hu chyi	ha sj	74 (357), 76 (368),	2
乎	能	hu neng	ha n+(ng)	274 (1339), 275 (1343), 277 (1354), 278 (1358), 279 (1362),	5
乎	如	hu ru	ha sj	10 (49), 12 (57), 14 (65), 16 (73), 40 (199), 42 (208), 44 (217),	7

Morph1	Morph2	GrString	OCString	Location	Freq
一	之	ijy	?jit tj+	140 (659), 146 (690),	2
一	來	i lai	?jit C-r+(k)	170 (817), 384 (1902),	2
一	言	i yan	?jit ngyan	151 (719), 153 (728), 188 (907),	3
憂	樂	iou leh	?(r)ju g-rawk	31 (154), 33 (164),	2
者	心	jee shin	tjA? sj+m	198 (955), 199 (961),	2
正	擅	jenq shann	tjengs !sj	315 (1551), 323 (1592),	2
正	形	jenq shyng	tjengs geng	90 (433), 160 (758),	2
將	自	jiang tzyh	tsjang sj	175 (841), 305 (1500), 378 (1873), 390 (1933),	4
見	其	jiann chyí	kens sj	58 (281), 61 (295), 313 (1543),	3
精	將	jing jiang	!sj tsjang	175 (840), 179 (860),	2
敬	守	jinq shoou	krjengs sj	23 (110), 332 (1644),	2

Morph1	Morph2	GrString	OCString	Location	Freq
君	子	jiun tzyy	kjun tsj+?	141 (662), 144 (679),	2
中	不	jong buh	k-ljung sj	158 (750), 253 (1233),	2
中	無	jong wu	k-ljung sj	222 (1075), 393 (1949),	2
之	必	jy bih	tj+ sj	30 (150), 172 (826), 173 (831), 326 (1610),	4
之	不	jy buh	tj+ sj	216 (1046), 218 (1056),	2
之	情	jy chyng	tj+ sj	36 (179), 78 (378),	2
之	道	jy daw	tj+ lu?	64 (310), 312 (1537), 337 (1669), 394 (1955),	4
之	而	jy erl	tj+ sj	180 (866), 284 (1387), 298 (1462),	3
之	者	jy jee	tj+ tjA?	198 (954), 199 (960),	2
之	閒	jy jian	tj+ kren	5 (25), 342 (1692),	2
之	精	jy jing	tj+ tsj	1 (3), 126 (595),	2

Morph1	Morph2	GrString	OCString	Location	Freq
之	極	jy jyi	tj+ g(r)j+k	163 (777), 287 (1407),	2
之	生	jy sheng	tj+ srjeng	306 (1506), 324 (1598), 369 (1828),	3
之	聖	jy shenq	tj+ sj	8 (39), 228 (1106),	2
之	失	jy shy	tj+ sj	318 (1567), 346 (1713),	2
之	形	jy shyng	tj+ geng	132 (621), 263 (1282),	2
之	所	jy suoo	tj+ s(k)rja?	83 (401), 85 (410), 87 (419), 91 (438), 94 (452), 344 (1701), 345 (1707),	7
之	思	jy sy	tj+ sj+	282 (1377), 283 (1384),	2
之	圖	jy twu	tj+ d/la	319 (1573), 347 (1719),	2
治	之	jyh jy	lrj+ tj+	177 (852), 198 (953),	2
疾	動	jyi donq	sj dong?	348 (1724), 351 (1739),	2
執	一	jy i	sj ?jit	140 (658), 142 (669),	2

Morph1	Morph2	GrString	OCString	Location	Freq
可	止	kee jyy	khaj? tj+?	19 (87), 68 (330),	2
廣	思	kuanqsy	!sj sj+	349 (1729), 353 (1751),	2
困	乃	kuenn nae	!sj sj	297 (1457), 356 (1764),	2
樂	喜	leh shii	g-rawk x(r)j+?	31 (155), 33 (165),	2
莫	若	moh ruoh	mak njak	302 (1483), 303 (1489), 329 (1624), 330 (1630), 331 (1636), 332 (1642), 333 (1648),	7
目	不	muh buh	sj sj	181 (872), 291 (1427),	2
目	聽	muh tsong	sj tshong	122 (575), 231 (1121),	2
乃	可	nae kee	sj khaj?	68 (329), 81 (392),	2
乃	能	nae neng	sj n+(ng)	220 (1065), 233 (1131),	2
乃	生	nae sheng	sj srjeng	128 (603), 310 (1527),	2
乃	死	nae syy	sj sjj?	209 (1014), 297 (1458),	2

Morph1	Morph2	GrString	OCString	Location	Freq
乃	爲	nae wei	sj w(r)jaj	319 (1571), 347 (1717),	2
能	正	neng jenq	n+(ng) tjengs	118 (558), 229 (1111),	2
怒	欲	nuh yuh	nas V na? sj	32 (158), 34 (168),	2
平	正	pyng jenq	brjeng tjengs	315 (1550), 323 (1591), 325 (1604),	3
然	而	ran erl	njan sj	162 (770), 243 (1182),	2
然	后	ran how	njan g(r)o?	120 (564), 204 (989), 205 (994), 206 (999), 207 (1004),	5
人	害	ren hay	njin Hkat(s)	227 (1102), 259 (1263),	2
人	之	ren jy	njin tj+	91 (437), 111 (531), 306 (1505), 324 (1597), 369 (1827),	5
如	窮	ru chyong	sj g(r)jung	45 (219), 77 (371),	2
如	在	ru tzay	sj dz+?	15 (67), 17 (75), 41 (201),	3
擅	匈	shann shiong	!sj !sj	315 (1552), 323 (1593),	2

Morph1	Morph2	GrString	OCString	Location	Freq
舍	精	sheh jing	sj tsj	124 (588), 174 (838),	2
生	不	sheng buh	srjeng sj	60 (292), 310 (1528),	2
聲	而	sheng erl	xjeng sj	21 (102), 62 (302),	2
生	也	sheng yee	srjeng sj	93 (448), 306 (1507), 324 (1599), 369 (1829),	4
聖	人	shenq ren	sj njin	8 (40), 113 (539), 228 (1107),	3
下	服	shiah fwu	gra? bj+k	152 (725), 269 (1315),	2
下	聽	shiah ting	gra? hleng	154 (734), 271 (1324),	2
喜	怒	shii nuh	x(r)j+? nas V na?	32 (157), 34 (167), 110 (526), 327 (1614), 373 (1849),	5
心	安	shin an	sj+m ?an	66 (319), 193 (934), 196 (946),	3
心	而	shin erl	sj+m sj	89 (430), 357 (1770),	2
心	靜	shin jinq	sj+m sj	67 (323), 80 (387),	2

Morph1	Morph2	GrString	OCString	Location	Freq
心	之	shin jy	sj+m tj+	27 (132), 36 (178), 132 (620), 201 (970), 202 (979),	5
心	在	shin tzay	sj+m dz+?	121 (570), 147 (695), 183 (882), 253 (1231),	4
心	也	shin yee	sj+m sj	198 (956), 199 (962),	2
修	心	shiou shin	sjjw sj+m	80 (386), 89 (429),	2
失	度	shy duh	sj laks	318 (1568), 346 (1714),	2
失	之	shy jy	sj tj+	30 (149), 172 (825), 326 (1609), 382 (1894), 387 (1919),	5
失	以	shy yii	sj lj+?	92 (441), 95 (455),	2
是	故	shyh guh	sj ka?(s)	9 (43), 18 (80), 73 (353), 112 (536), 328 (1619),	5
是	謂	shyh wey	sj wj+ts	24 (115), 168 (804), 242 (1177), 367 (1816),	4
形	不	shyng buh	geng sj	61 (297), 156 (742), 339 (1677),	3
形	也	shyng yee	geng sj	49 (241), 90 (434),	2

Morph1	Morph2	GrString	OCString	Location	Freq
所	不	suoo buh	s(k)rja? sj	83 (402), 85 (411), 87 (420),	3
所	得	suoo der	s(k)rja? i+k	93 (445), 96 (459),	2
所	失	suoo shy	s(k)rja? sj	91 (439), 94 (453),	2
所	以	suoo yii	s(k)rja? lj+?	30 (147), 49 (238), 89 (427), 326 (1607), 387 (1917),	5
思	之	sy jy	sj+ tj+	176 (847), 282 (1376), 282 (1378), 283 (1383), 284 (1386), 298 (1461),	6
四	體	syh tii	s(p)ij/ts hrj?	217 (1050), 288 (1411),	2
天	地	tian dih	hlin lrjajs ?	5 (23), 220 (1068),	2
天	下	tian shiah	hlin gra?	150 (714), 152 (724), 154 (733), 185 (893), 189 (915), 239 (1164), 269 (1314), 271 (1323),	8
聰	明	tsong ming	tshong mrjang	122 (576), 231 (1122),	2
此	以	tsyy yii	sj lj+?	309 (1521), 317 (1560),	2
在	中	tzay jong	dz+? k-ljung	121 (571), 183 (883), 253 (1232),	3

Morph1	Morph2	GrString	OCString	Location	Freq
在	心	tzay shin	dz+? sj+m	316 (1557), 383 (1899),	2
在	於	tzay yu	dz+? sj	15 (68), 17 (76), 41 (202), 56 (272), 147 (696), 193 (932),	6
則	失	tzer shy	ts+k sj	371 (1838), 372 (1843), 382 (1893),	3
卒	乎	tzwu hu	Stjut ha	16 (72), 55 (268), 74 (356),	3
足	以	tzwu yii	tsjok lj+?	266 (1297), 267 (1304),	2
自	成	tzyh cheng	sj djeng	29 (143), 39 (194),	2
自	至	tzyh jyh	sj tjits	162 (772), 305 (1501),	2
自	來	tzyh lai	sj C-r+(k)	175 (842), 379 (1879),	2
自	生	tzyh sheng	sj stjeng	29 (141), 210 (1019),	2
萬	物	wann wuh	sj sj	26 (126), 100 (478), 101 (483), 143 (676), 164 (783), 184 (886), 273 (1332), 395 (1958),	8
爲	之	wei jy	w(r)aj tj+	319 (1572), 347 (1718),	2

Morph1	Morph2	GrString	OCString	Location	Freq
聞	其	wen chyí	mjun sj	54 (264), 62 (300),	2
謂	之	wey jy	wj+ts tj+	6 (28), 8 (38), 64 (309), 135 (634), 137 (643), 228 (1105),	6
我	心	woo shin	ngaj? sj+m	194 (937), 196 (945),	2
無	所	wu suoo	sj s(k)ja?	65 (315), 77 (373),	2
物	不	wuh buh	sj sj	144 (682), 395 (1959),	2
物	以	wuh yii	sj lj+?	100 (479), 101 (484),	2
言	之	yan jy	ngyan tj+	188 (908), 261 (1271),	2
也	必	yee bih	sj sj	324 (1600), 369 (1830),	2
也	者	yee jee	sj tjA?	82 (397), 125 (591),	2
移	能	yi neng	!sj n+(ng)	117 (556), 360 (1785),	2
以	成	yii cherng	lj+? djeng	96 (461), 101 (485),	2

Morph1	Morph2	GrString	OCString	Location	Freq
以	生	yii sheng	lj+? srjeng	93 (447), 100 (480),	2
以	失	yii shy	lj+? sj	30 (148), 326 (1608), 387 (1918),	3
以	為	yii wei	lj+? w(r)jaj	124 (585), 213 (1030), 215 (1040), 309 (1522),	4
迎	人	yng ren	sj njin	257 (1252), 259 (1262),	2
於	大	yu dah	sj lats	235 (1143), 236 (1148),	2
於	中	yu jong	sj k-ljung	147 (697), 224 (1087),	2
於	心	yu shin	sj sj+m	56 (273), 193 (933),	2
於	四	yu syh	sj s(p)ij/ls	240 (1168), 352 (1745),	2
於	天	yu tian	sj hlin	5 (22), 11 (53), 189 (914),	3
欲	利	yuh lih	sj C-rjits	32 (159), 34 (169),	2

Morph1	Morph2	Morph3	GrString	OCString	Location	Freq
彼	道	不	bii daw buh	sj lu? sj	69 (333), 71 (343),	2
彼	心	之	bii shin jy	sj sj+m tj+	36 (177), 202 (978),	2
不	見	其	buh jiann chyi	sj kens sj	58 (280), 61 (294), 313 (1542),	3
不	足	以	buh tzwu yii	sj tsjok lj+?	266 (1296), 267 (1303),	2
不	移	能	buh yi neng	sj !sj n+(ng)	117 (555), 360 (1784),	2
氣	迎	人	chih yng ren	!sj sj njin	257 (1251), 259 (1261),	2
道	乃	可	daw nae kee	lu? sj khaj?	68 (328), 81 (391),	2
得	而	天	der erl tian	t+k sj hlin	151 (721), 268 (1311),	2
定	而	天	dinq erl tian	dengs sj hlin	153 (730), 270 (1320),	2
度	乃	為	duh nae wei	laks sj w(r)aj	318 (1569), 346 (1715),	2
耳	目	不	eel muh buh	nj+? sj sj	181 (871), 291 (1426),	2
耳	目	聰	eel muh tsong	nj+? sj tshong	122 (574), 231 (1120),	2
而	不	移	erl buh yi	sj sj !sj	117 (554), 360 (1783),	2
而	天	下	erl tian shiah	sj hlin gra?	152 (723), 154 (732), 269 (1313), 271 (1322),	4
凡	道	無	farn daw wu	sj lu? sj	65 (313), 97 (465),	2
凡	人	之	farn ren jy	sj njin tj+	306 (1504), 324 (1596), 369 (1826),	3
凡	心	之	farn shin jy	sj sj+m tj+	27 (131), 132 (619),	2
乎	其	如	hu chyi ru	ha sj sj	74 (357), 76 (368),	2

Morph1	Morph2	Morph3	GrString	OCString	Location	Freq
乎	如	在	hu ru tzay	ha sj dz+?	14 (65), 16 (73), 40 (199),	3
憂	樂	喜	iou leh shii	?(r)ju g-rawk x(r)j	31 (154), 33 (164),	2
者	心	也	jee shin yee	tjA? sj+m sj	198 (955), 199 (961),	2
正	擅	匈	jenq shann shiong	tjengs !sj !sj	315 (1551), 323 (1592),	2
見	其	形	jiann chyi shyng	kens sj geng	58 (281), 61 (295),	2
之	必	以	jy bih yii	tj+ sj lj+?	30 (150), 326 (1610),	2
之	而	不	jy erl buh	tj+ sj sj	284 (1387), 298 (1462),	2
之	者	心	jy jee shin	tj+ tjA? sj+m	198 (954), 199 (960),	2
之	生	也	jy sheng yee	tj+ srjeng sj	306 (1506), 324 (1598), 369 (1828),	3
之	聖	人	jy sheng ren	tj+ sj njin	8 (39), 228 (1106),	2
之	失	度	jy shy duh	tj+ sj laks	318 (1567), 346 (1713),	2
之	所	不	jy suoo buh	tj+ s(k)rja? sj	83 (401), 85 (410), 87 (419),	3
之	所	失	jy suoo shy	tj+ s(k)rja? sj	91 (438), 94 (452),	2
之	思	之	jy sy jy	tj+ sj+ tj+	282 (1377), 283 (1384),	2
樂	喜	怒	leh shii nuh	g-rawk x(r)j+? na:	31 (155), 33 (165),	2
目	聰	明	muh tsong ming	sj tshong mrjang	122 (575), 231 (1121),	2
乃	為	之	nae wei jy	sj w(r)aj tj+	319 (1571), 347 (1717),	2
怒	欲	利	nuh yuh lih	nas V na? sj C-rj	32 (158), 34 (168),	2
平	正	擅	pyng jenq shann	brjeng tjengs !sj	315 (1550), 323 (1591),	2

Morph1	Morph2	Morph3	GrString	OCString	Location	Freq
人	之	生	ren jy sheng	njin tj+ srjeng	306 (1505), 324 (1597), 369 (1827),	3
如	窮	無	ru chyong wu	sj g(r)jung sj	45 (219), 77 (371),	2
如	在	於	ru tzay yu	sj dz+? sj	15 (67), 17 (75), 41 (201),	3
生	也	必	sheng yee bih	srjeng sj sj	324 (1599), 369 (1829),	2
喜	怒	欲	shii nuh yuh	x(r)j+? nas V na?	32 (157), 34 (167),	2
心	在	中	shin tzay jong	sj+m dz+? k-ljung	121 (570), 183 (882), 253 (1231),	3
失	度	乃	shy duh nae	sj laks sj	318 (1568), 346 (1714),	2
失	之	必	shy jy bih	sj tj+ sj	30 (149), 172 (825), 326 (1609),	3
所	不	能	suoo buh neng	s(k)rja? sj n+(ng)	83 (402), 85 (411), 87 (420),	3
所	得	以	suoo der yii	s(k)rja? t+k lj+?	93 (445), 96 (459),	2
所	失	以	suoo shy yii	s(k)rja? sj lj+?	91 (439), 94 (453),	2
所	以	失	suoo yii shy	s(k)rja? lj+? sj	30 (147), 326 (1607), 387 (1917),	3
思	之	而	sy jy erl	sj+ tj+ sj	284 (1386), 298 (1461),	2
思	之	思	sy jy sy	sj+ tj+ sj+	282 (1376), 283 (1383),	2
天	下	服	tian shiah fwu	hlin gra? bj+k	152 (724), 269 (1314),	2
天	下	聽	tian shiah ting	hlin gra? hleng	154 (733), 271 (1323),	2
在	於	心	tzay yu shin	dz+? sj sj+m	56 (272), 193 (932),	2
萬	物	以	wann wuh yii	sj sj lj+?	100 (478), 101 (483),	2
為	之	圖	wei jy twu	w(r)aj tj+ d/la	319 (1572), 347 (1718),	2

Morph1	Morph2	Morph3	GrString	OCString	Location	Freq
謂	之	聖	wey jy shenq	wj+ts tj+ sj	8 (38), 228 (1105),	2
也	必	以	yee hih yii	sj sj lj+?	324 (1600), 369 (1830),	2
以	失	之	yii shy jy	lj+? sj tj+	30 (148), 326 (1608), 387 (1918),	3

Morph1	Morph2	Morph3	Morph4	GrString	OC.String	Location	Freq
不	見	其	形	buh jiann chyi shyng	sj kens sj geng	58 (280), 61 (294),	2
得	而	天	下	der erl tian shiah	t+k sj hlin gra?	151 (721), 268 (1311),	2
定	而	天	下	dinq erl tian shiah	dengs sj hlin gra?	153 (730), 270 (1320),	2
度	乃	為	之	duh nae wei jy	laks sj w(r)jaj tj+	318 (1569), 346 (1715),	2
耳	目	聽	明	eel muh tsong ming	nj+? sj tshong mrjang	122 (574), 231 (1120),	2
而	不	移	能	erl buh yi neng	sj sj !sj n+(ng)	117 (554), 360 (1783),	2
而	天	下	服	erl tian shiah fwu	sj hlin gra? bj+k	152 (723), 269 (1313),	2
而	天	下	聽	erl tian shiah ting	sj hlin gra? hleng	154 (732), 271 (1322),	2
凡	人	之	生	farn ren jy sheng	sj njin tj+ srjeng	306 (1504), 324 (1596), 369 (1826),	3
乎	如	在	於	hu ru tzay yu	ha sj dz+? sj	14 (65), 16 (73), 40 (199),	3
憂	樂	喜	怒	iou leh shii muh	?(r)ju g-rawk x(r)j+? nas V na?	31 (154), 33 (164),	2
之	者	心	也	jy jee shin yee	tj+ tjA? sj+m sj	198 (954), 199 (960),	2
之	生	也	必	jy sheng yee bih	tj+ srjeng sj sj	324 (1598), 369 (1828),	2
之	失	度	乃	jy shy duh nae	tj+ sj laks sj	318 (1567), 346 (1713),	2
之	所	不	能	jy suoo buh neng	tj+ s(k)rja? sj n+(ng)	83 (401), 85 (410), 87 (419),	3
之	所	失	以	jy suoo shy yii	tj+ s(k)rja? sj lj+?	91 (438), 94 (452),	2
樂	喜	怒	欲	leh shii nuh yuh	g-rawk x(r)j+? nas V na? sj	31 (155), 33 (165),	2
乃	為	之	圖	nae wei jy twu	sj w(r)jaj tj+ d/la	319 (1571), 347 (1717),	2
平	正	擅	匈	pyng jenq shann shiong	brjeng tjengs !sj !sj	315 (1550), 323 (1591),	2
人	之	生	也	ren jy sheng yee	njin tj+ srjeng sj	306 (1505), 324 (1597), 369 (1827),	3
生	也	必	以	sheng yee bih yii	srjeng sj sj lj+?	324 (1599), 369 (1829),	2
喜	怒	欲	利	shii nuh yuh lih	x(r)j+? nas V na? sj C-rjits	32 (157), 34 (167),	2

Morph1	Morph2	Morph3	Morph4	GrString	OCString	Location	Freq
失.	度	乃	爲	shy duh nae wei	sj laks sj w(r)jaj	318 (1568), 346 (1714),	2
失.	之	必	以	shy jy bih yii	sj tj+ sj lj+?	30 (149), 326 (1609),	2
所	以	失.	之	suoo yii shy jy	s(k)rja? lj+? sj tj+	30 (147), 326 (1607), 387 (1917),	3
思	之	而	不	sy jy erl buh	sj+ tj+ sj sj	284 (1386), 298 (1461),	2
思	之	思	之	sy jy sy jy	sj+ tj+ sj+ tj+	282 (1376), 283 (1383),	2
謂	之	聖	人	wey jy sheng ren	wj+ts tj+ sj njin	8 (38), 228 (1105),	2
以	失.	之	必	yii shy jy bih	lj+? sj tj+ sj	30 (148), 326 (1608),	2

The two programs listed below were written in ObjectPAL, a database language used for the database system Paradox for Windows 1.0 by Borland International. ObjectPAL is structured similarly to C++ and Pascal. For more information on the syntax and commands of the language see *ObjectPAL Developer's Guide*.

The first program listed below was used to calculate the Robinson Index of Agreement. The second was designed to create the various indexes to the NeyYeh. These programs are provided as both a guide to those thinking of similar studies, and also as a check against errors in methodology.

Computer programs are not easy to understand for someone who does not already know how to program, though anyone with a bit of programming experience should find the programs highly readable. No attempt, however, has been made to explain the logic of the programs and they are sparsely annotated. The main point to remember when going through the programs is that each *method* and *procedure* controls a certain *object* and that these programs are not hierarchical but object oriented.

Dearing points out that: "the intellectual labor of writing even a fairly short program is such that one seldom has time or energy to do more than obtain satisfactory results with it" (1974, 215). Although computer programming is much easier and more accessible than

in 1974, computer programming is no less an evolutionary process where refinements and adaptations can always be made.

Program 1: RIA Calculation Program

```

:|BeginMethod|#Page2|Type|
Type
  NumAry=Array[] Number
  IntAry=Array[] SmallInt
endType
:|EndMethod|#Page2|Type|
:|BeginMethod|#Page2|Var|
Var
  dataTC, matTC TCursor
endVar
:|EndMethod|#Page2|Var|
:|BeginMethod|#Page2|Const|
Const
  dataDB = String("RIAdta.db")
endConst
:|EndMethod|#Page2|Const|
:|BeginMethod|#Page2|proc|
proc abortFrm(x String)
  msgStop("Terminal Error", "Cannot open DB "+x)
  if msgQuestion("Terminal Error", "Terminate?")="Yes" then
    close()
  else
    debug()
  endif
endproc
:-----*****-----
:|EndMethod|#Page2|proc|
:|BeginMethod|#Page2.clusterBx|Type|
Type
  XYCoordAry = Array[2] SmallInt
  AlphaAry = Array[] String
endType
:|EndMethod|#Page2.clusterBx|Type|
:|BeginMethod|#Page2.clusterBx|Var|
Var
  classes, totalTypes SmallInt
  mat, sums NumAry
  simTC, pairsTC, ctrTC TCursor
  centrAry AlphaAry
endVar

```

```

:]EndMethod|#Page2.clusterBx|Var|
:]BeginMethod|#Page2.clusterBx|Const|
Const
    matDB = String("smlrmat.db")
    pairsDB = string("pairs.db")
    ctrDB = string("clsctr.db")
endConst
:]EndMethod|#Page2.clusterBx|Const|
:]BeginMethod|#Page2.clusterBx|proc|
: Matrix procedures
: finds the row and columns
proc findRC( indexNum SmallInt) XYCoordAry
var
    i, j SmallInt
    Ary XYCoordAry
endvar
Ary.fill(0)
for i from 1 to classes
    for j from i to classes
        if findMat(i,j) = indexNum then
            ary[1] = i
            ary[2] = j
            return ary
        endif
    endFor
endFor
msgstop("error", "Couldn't find rc for index number")
endproc
:-----*****-----
proc findmat( x SmallInt, y SmallInt) SmallInt
    return SmallInt( (2*classes-x)*(x-1)/2 + y)
endproc
:-----*****-----
proc findCol( r SmallInt, t SmallInt) SmallInt
    return (1-(2*classes-r)*(r-1)/2)
endproc
:-----*****-----
proc filmat( x SmallInt, y SmallInt, n Number)
    mat[findmat(x,y)] = n
endproc
:-----*****-----
proc addmat( x SmallInt, y SmallInt, n Number)
var i SmallInt endVar
    i = findmat(x,y)
    mat[i] = mat[i] + n
endproc
:-----*****-----
:-----*****-----
proc doSums()
    sums.setSize(classes)
    sums.fill(0.0)

```

```

scan dataTC:
  sums[dataTC."assemblage"] = sums[dataTC."assemblage"] + dataTC."frequency"
endScan
: sums.view("sums")
endproc
:-----*****-----
proc updateCtrDB(r SmallInt)
var i SmallInt endvar
for i from cntrAry.size() to 1 step -1
  if cntrAry[i] = blank() then cntrAry.remove(i) endif
endFor
ctrTC.edit()
for i from cntrAry.size() to 1 step -1
  ctrTC.insertAfterRecord()
  ctrTC."round" = r
  ctrTC."assemblage" = i
  ctrTC."classname" = cntrAry[i]
  ctrTC.postRecord()
endFor
ctrTC.endEdit()
return
endProc
:-----
proc errmsg()
  msgStop("Error", "Could not locate: (assemblage, CTR[k], type, i)")
  debug()
endproc
:-----

:|EndMethod|#Page2.clusterBx|proc|
:|BeginMethod|#Page2.clusterBx|writeToSimDB|
method writeToSimDB(r Smallint, mat NumAry)
var
  i SmallInt
  pos XYCoordAry
endvar
message("Round "+String(r)+" : Downloading the matrix to similarity DB")
simTC.end()
simTC.edit()
for i from 1 to mat.size()
  pos = findRC(i)
  simTC.insertAfterRecord()
  simTC."row" = pos[1]
  simTC."column" = pos[2]
  simTC."round" = r
  simTC."value" = mat[i]
  simTC.postRecord()
endfor
simTC.endEdit()
endmethod
:|EndMethod|#Page2.clusterBx|writeToSimDB|

```

```

;|BeginMethod|#Page2.clusterBx|amalgamate|
-----
proc updateCtrAry(p1 SmallInt ,p2 Smallint)
  cntrAry[p1] = cntrAry[p1] + cntrAry[p2].rTrim()
  cntrAry[p2] = blank()
: cntrAry.view()
return
endProc
-----
*****
method amalgamate(r Smallint) SmallInt
  var
    i, tfreq, k, newClass SmallInt
    pt IntAry
  endvar

  message("amalgamating data for round "+string(r))
  dataTC.edit()
  scan pairsTC for pairsTC."round" = r :
:   the assemblage pairsTC."seconded" is added to pairsTC."first"
    pt.addlast(pairsTC."second")
    for i from 1 to totalTypes
      if dataTC.locate("assemblage", pairsTC."second", "type", i) then
        tfreq = dataTC."frequency"
        dataTC.deleteRecord()
      else
        errMsg()
      endif
      if dataTC.locate("assemblage", pairsTC."first", "type", i) then
        dataTC."frequency" = tfreq + dataTC."frequency"
      else
        errMsg()
      endif
    endFor
: update the counter ary
    updateCtrAry(pairsTC."first",pairsTC."second")
  endScan

:change the assemblage numbers to be contiguous
: later add s.t. here so a total recaculation is unnecessary

  newClass = classes - SmallInt(pt.size())
  for i from 1 to newClass
    if NOT dataTC.locate("assemblage", i) then
      k= i+1
      while NOT dataTC.locate("assemblage", k)
        k= k+1
      endwhile
      scan dataTC for dataTC."assemblage" = k :
        dataTC."assemblage" = i
      endscan
    endif
  endfor

```

```

    endIf
  endFor
  dataTC.endEdit()
  return newClass
endmethod
:]EndMethod|#Page2.clusterBx|amalgamate|
:]BeginMethod|#Page2.clusterBx|ria|
var
  Nmat NumAry
endvar

: RIA pushButton
:-----
: runRIA
proc runRIA(nAry NumAry)
var
  i,j,k SmallInt
endvar
  k=1
  for i from 1 to (classes-1)
    for j from (i+1) to classes
      Nmat[k] = Nmat[k] + abs(nAry[i]-nAry[j])
      k = k + 1
    endfor
  endfor
: Nmat.view("Nmat")
endproc
:-----
: calculates the percentage of the "type" for the "assemblage"
proc calcPct(n NumAry) NumAry
var i SmallInt endvar
  for i from 1 to n.size()
    n[i] = 100*n[i]/sums[i]
  endfor
  return n
endproc
:-----
: loads type array
proc loadAry(n NumAry, t SmallInt) NumAry
var i SmallInt endvar
  for i from 1 to n.size()
    if dataTC.locate("assemblage", i, "type", t) then
      n[i] = Number(dataTC."frequency")
    else
      errMsg()
    endIf
  endfor
:n.view("% array, type "+string(t))
  return n
endproc
:-----

```

```
: calculates the Robinson Index of Agreement
```

```
method ria(r SmallInt)
```

```
var
```

```
  i,j,k SmallInt
```

```
  tnary NumAry
```

```
endvar
```

```
  tnAry.setSize(classes)
```

```
  tnAry.fill(0)
```

```
  Nmat.empty()
```

```
  for i from 1 to (classes-1)
```

```
    for j from i+1 to classes
```

```
      Nmat.addLast(0.0)
```

```
    endfor
```

```
  endfor
```

```
  for i from 1 to totalTypes
```

```
    tnAry = calcpcnt(loadAry(tnAry,i))
```

```
: tnAry.view("tnAry array, type "+string(i))
```

```
    runRIA(tnAry)
```

```
    message("Round "+string(r)+" : "+String(i)+" of "+string(totalTypes)+" completed")
```

```
  endFor
```

```
  mat.setSize((classes*(classes+1)/2))
```

```
  k = 1
```

```
  for i from 1 to (classes-1)
```

```
    filmat( i, i, -1)
```

```
    for j from (i+1) to classes
```

```
      filmat( i, j, 200.0 - Nmat[k])
```

```
      k=k+1
```

```
    endFor
```

```
  endFor
```

```
  filmat( classes, classes, -1)
```

```
: mat.view("the initialized matrix")
```

```
endmethod
```

```
:|EndMethod|#Page2.clusterBx|ria|
```

```
:|BeginMethod|#Page2.clusterBx|doSimMat|
```

```
Var
```

```
  P1, P2 IntAry
```

```
endVar
```

```
proc updateDB(round SmallInt)
```

```
var i, pt1, pt2 SmallInt endvar
```

```
  pairsTC.edit()
```

```
  pairsTC.end()
```

```
  for i from 1 to P1.size()
```

```
    if p1[i] < p2[i] then
```

```
      pt1 = P1[i]
```

```

    pt2 = P2[i]
else
    pt1 = P2[i]
    pt2 = P1[i]
endif
pairsTC.insertAfterRecord()
pairsTC."round" = round
pairsTC."first" = pt1
pairsTC."second" = pt2
pairsTC."RIA" = mat[findmat(pt1, pt2)]
endFor
pairsTC.endEdit()
endProc
:-----
proc updateCtr()
var i, tmp SmallInt endvar
for i from 1 to P1.size()
    if tmp < 0 then
        endif
    endFor
:CTR.view("debug- new CTR")
return
endProc
:-----
proc loadRow( rowNum SmallInt) NumAry
var
    r NumAry
    i SmallInt
endvar
for i from 1 to classes
    r.addlast(mat[iif(i < rowNum, findmat(i,rowNum), findmat(rowNum,i))])
endFor
return r
endProc
:-----
: finds the max value of an array and returns index
proc maxR(i SmallInt, r NumAry) SmallInt
var
    j, maxInd SmallInt
endvar

maxInd = i
for j from 1 to classes
    if r[j] > r[maxInd] then maxInd = j endif
endFor
return maxInd
endProc
:-----*****-----
proc maxPairs(r SmallInt) Logical
var
    potpairs    IntAry

```

```

row      NumAry
i, assm1, assm2  smallint
cf       Logical
endvar
message("Round "+string(r)+": Finding potential pairs in the similarity DB")
P1.empty()
P2.empty()
potpairs.setsize(classes)

for i from 1 to classes
  row = loadRow(i)
  potPairs[i] = maxR(i,row)
endFor
: check for potential maximal pairs
for i from 1 to classes
  assm1 = smallInt(potpairs[i])
  assm2 = smallInt(potpairs[assm1])
  if i = assm2 then
    if NOT (P1.contains(assm2) OR P2.contains(i)) then
      P1.addlast(assm1)
      P2.addlast(assm2)
    endif
  endif
endFor

cf = false
switch
  case P1.size() = 0 :           ; all assemblages equal
  case classes < 3 :           ; last round
    updateDB(r)
  otherwise:
    updateDB(r)
    cf = true
endSwitch

return cf
endProc
:-----*****-----
method doSimMat(r SmallInt)
var
  i SmallInt
endVar
: load the matrix
mat.empty()
scan simTC for simTC."round" = r :
  mat.addlast(simTC."value")      ; this assumes simDB in correct order
endScan
maxPairs(r)
message("Finished Simliarity Matrix calculations!")

endmethod

```

```

:]EndMethod|#Page2.clusterBx|doSimMat|
:]BeginMethod|#Page2.clusterBx.AmalBtn|Var|
Var
  pairsTC TCursor
  P1, P2 IntAry
endVar
:]EndMethod|#Page2.clusterBx.AmalBtn|Var|
:]BeginMethod|#Page2.clusterBx.AmalBtn|pushButton|
method pushButton(var eventInfo Event)
endmethod
:]EndMethod|#Page2.clusterBx.AmalBtn|pushButton|
:]BeginMethod|#Page2.clusterBx.SImBtn|pushButton|
method pushButton(var eventInfo Event)
endmethod
:]EndMethod|#Page2.clusterBx.SImBtn|pushButton|
:]BeginMethod|#Page2.clusterBx.RIABtn|pushButton|
method pushButton(var eventInfo Event)
var
  i, roundNum SmallInt
endVar

:set initial values

if NOT ftrans() then abortFrm("Can't begin") endif
continueFlag = true
classes = smallint(dataTC.cMax("assemblage"))           ; calculate # of assemblages
totalTypes = smallint(dataTC.cMax("type"))              ; calculate # of types
for i from 1 to classes                                ; initialize CTR
  ctrAry.addlast(chr(96+i))
endFor
roundNum = 1
updateCtrDB(roundNum)                                  ; calculate ctr Array & record

if msgQuestion("debug", "continue") = "Yes" then
while classes > 1
  dosums()                                             ; fill the sums array
  ria(roundNum)                                         ; calculate the ria values for each
                                                         ; assemblage and place results in matrix
  writeToSimDB(roundNum, mat)                           ; download ria to dbase
  doSimMat(roundNum)
  classes=amalgamate(roundNum)
  roundnum = roundNum + 1
  updateCtrDB(roundNum)
endWhile
endif
simTC.close()
dataTC.close()
ctrTC.close()
pairsTC.close()
message("Finished Robinson calculations!")
endmethod

```

```

:|EndMethod|#Page2.clusterBx.RIABtn|pushButton|
-----*****-----
:|BeginMethod|#Page2.clusterBx.RIABtn|proc|
:-----*****-----
: transfers contents of dataDB to tempDB then empties pairsDB
proc ftrans() Logical
var dTC TCursor endvar
const
  tempDB = string("temp.db")
  dataDB = string("ria12.db")           ; supersedes global DataDB
endConst

if NOT dTC.open(dataDB) then abortFrm(dataDB) endIf
if NOT dTC.copy(tempDB) then
  msgStop("ERROR", "could not copy "+dataDB+"\n to \n"+tempDB)
  return false
else
  dTC.close()
  message("Copy Complete")
  : open temp as dataDB
  if NOT dataTC.open(tempDB) then abortFrm(tempDB) endIf
  if NOT pairsTC.open(pairsDB) then abortFrm(pairsDB) endIf
  pairsTC.empty()
  if NOT ctrTC.open(ctrDB) then abortFrm(ctrDB) endIf
  ctrTC.empty()
  if NOT simTC.open(matDB) then abortFrm(matDB) endIf
  simTC.empty()
endIf
return true
endProc
:|EndMethod|#Page2.clusterBx.RIABtn|proc|
:|BeginMethod|#Page2.downLoadBtn|pushButton|
var
  partition IntAry
  rTC TCursor
endvar
:-----*****-----
proc partionClass(recNum Number) SmallInt
var
  i, num SmallInt
endvar
num = Smallint(recNum)
for i from 1 to (partition.Size()-1)
  if num >= partition[i] AND num < partition[i+1] then
    return i
  endIf
endFor
msgStop("error", "Could not find recum in partition")
return 0
endproc
:-----*****-----

```

```

method pushButton(var eventInfo Event)
var
  i, totalRec, classSize, temp, riagrid SmallInt
  startClass Smallint
  xM, freqAry IntAry
  chrTC TCursor
  checkSumDTA, checkSumRec Number
  Testflag Logical
  qbeName String
endVar

const
  ; establish a class boundary size- this will need a less subjective method latter on
: StartClass = SmallInt(7)
  recFile = String(":\priv:answer.db")
  ckrec = String("myrec.db")
endConst

testFlag = false

qbeName = iif(testFlag, "test1.qbe", "stripnl.qbe")
StartClass = iif(testFlag, 4, 8)
Startclass=12
freqAry.setSize(StartClass)
temp = 0
: execute the Query to filter out NewLineMarkers etc. then open filtered file
message("Executing Query...")
if executeQBFile(qbeName) then
  message("Finished Query")

  if NOT rTC.open(recFile) then abortFrm(recFile) endif
  totalRec = smallInt(rTC.nRecords())
  scan rTC:
    ; a list of all the morphs used
    if xM.indexOf(rTC."morphNum") = 0 then
      xM.addlast(rTC."morphNum")
    endif
  endScan

  riagrid = smallInt(xM.size()*startclass

: open the data matrix
  if NOT dataTC.open(dataDB) then abortFrm(dataDB) endif
  dataTC.empty()

: fill partition array to identify the initial class boundaries
  classSize = SmallInt(Floor(Number(totalRec)/Number(StartClass)))

  for i from 1 to StartClass
    partition.addLast((i-1)*classSize+1)
  endFor
  partition.addLast(totalRec+1) ; any remainder gets tacked on to the end

```

```

partition.view("partition CS "+string(classsize))

:if msgQuestion("Debug", "continue?") = "Yes" then
: begin downloading the original file
  message("Proceeding with file translation...")
  dataTC.edit()

  for i from 1 to xM.Size()
    rTC.home()
    for k from 1 to StartClass
      freqAry[k]= 0
    endFor
    if rtc.locate("morphNum", xM[i]) then
      freqAry[partionClass(rtc.RecNo())]=1
      while rtc.locateNext("morphNum", xM[i])
        k = partionClass(rtc.RecNo())
        freqAry[k] = freqAry[k] + 1
      endWhile
    endIf
    for k from 1 to StartClass
      dataTC.InsertAfterRecord()
      dataTC."assemblage" = k
      dataTC."type" = i
      dataTC."frequency" = freqAry[k]
      temp = temp +1
      message("In partiton "+string(k)+" Adding record "+string(temp)+" of "+string(riagrid))
    endFor
  endFor

  dataTC.endEdit()
endIf
else
  abortFrm(qbeName)
endIf

message("Finished downloading the recension file. Ready for Robinson calculations!")

; are there any errors?
checkSumDTA = dataTC.csum("frequency")
checkSumRec = rTC.nRecords()
if checksumDTA <> checkSumRec then
  msgStop("Error", "the data and anwsver dbase do not checksum\n cannot run RIA")
else
  message("checkSum OK")
endIf
dataTC.close()
rTC.close()
msgInfo("Debug", String(temp)+" new records added to "+dataDB)

endmethod
:|EndMethod|#Page2.downLoadBtn|pushButton|

```

Program 2: Pattern & Concordance Generation Program

```

:|BeginMethod|#Page2|Type|

```

```

: This program creates a listing from a pattern determined by
: the user. myrecen.db is the source for the pattern
:

```

- ```

: 1) the program determines what pattern to look for
:
: 2) finds the patterns and places them in a pair of tables
: the first table (twos, threes, fours) identifies the
: pattern, the second table (patloctn.db) identifies
: the location, in myrec, of the pattern
:
: 3) creates the elements necessary for a report
:
: 4) writes the report
:

```

```
Type
```

```
 AryObj = Array[] SmallInt
```

```
endType
```

```

:|EndMethod|#Page2|Type|

```

---

```

:|BeginMethod|#Page2|Var|

```

```
Var
```

```

 operation, tupleSize SmallInt
 pTC, countTC TCursor
 opName, PatternFile, RepDB String

```

```
endVar
```

```

:|EndMethod|#Page2|Var|

```

---

```

:|BeginMethod|#Page2|Const|

```

```
Const
```

```

 patLctnFILE = String("patLoctn.db")
 NewLineMarker = SmallInt(-1)
 BlankM = SmallInt(0)

```

```
endConst
```

```

:|EndMethod|#Page2|Const|

```

---

```

:|BeginMethod|#Page2|proc|

```

```
: halts execution of the program if a file cannot be opened
```

```
proc abortFrm(x String)
```

```

 msgStop("Terminal Error", "Cannot open DB "+x)
 if msgQuestion("Terminal Error", "Terminate?")="Yes" then
 close()
 else
 debug()
 endif

```

```
endproc
```

```

:|EndMethod|#Page2|proc|

```

---

```

:|BeginMethod|#Page2.RptBox|Const|

```

```
Const
```

```
 myRecDB = String("myRecen.db")
```

```

 mrphsdb = String("mrphms.db")
endConst
:]EndMethod|#Page2.RptBox|Const|
:]BeginMethod|#Page2.RptBox|proc|
:-----
; Counts the number of lines in myrec.db
:-----
proc setlines() Aryobj
var
 ln Aryobj
 myTC TCursor
 i SmallInt
endvar

if NOT myTC.open(myRecDB) then abortFrm(myRecDB) endif
i=1 ; calculate line number
message("Scanning "+myRecDB+"....")
scan myTC:
 if myTC."morphNum" = NewLineMarker then
 i=i+1
 endif
 ln.addLast(i)
endScan
myTC.close()
return ln
endproc
:]EndMethod|#Page2.RptBox|proc|
:]BeginMethod|#Page2.RptBox.CleanUpBtn|pushButton|
:-----
; cleans up temporary files
:-----
method pushButton(var eventInfo Event)
var
 repTC, patLctnTC, patTC TCursor
endvar

if MsgQuestion("CleanUp", "To save storage\n empty ReportDB files?")= "Yes" then

 ; open Tables
 if NOT patTC.open(PatternFILE) then abortFrm(PatternFILE) endif
 if NOT patLctnTC.open(patLctnFILE) then abortFrm(patLctnFILE) endif
 if NOT repTC.open(repdb) then abortFrm(repdb) endif

; empty tables
 repTC.empty()
 patTC.empty()
 patLctnTC.empty()

; close tables
 repTC.close()
 patTC.close()

```

```

 patLctnTC.close()
 endif
message("Tables Emptied")
endmethod
:|EndMethod|#Page2.RptBox.CleanUpBtn|pushButton|
:|BeginMethod|#Page2.RptBox.PairsRptBtn|pushButton|
:-----
: sorts the report dbase alphabetically
:-----
proc sortReport(sourceTbl String)
 var
 repTable Table
 endvar
 repTable.attach(sourceTbl)
 message("sorting "+sourceTbl+" ...")
 sort repTable
 on "GRString", "OCString"
 endSort
 message("sorted...")
endProc
:-----
method pushButton(var eventInfo Event)
 var
 repTc, patLctnTC, patTC, mpTC TCursor
 dilimiter,secondLine,tempStr String
 lineNumber Aryobj
 i SmallInt
 endvar

: open Tables
if NOT patTC.open(PatternFILE) then abortFrm(PatternFILE) endif
if NOT patLctnTC.open(patLctnFILE) then abortFrm(patLctnFILE) endif
if NOT mpTC.open(mrphsDB) then abortFrm(mrphsDB) endif
if NOT repTC.open(repdb) then abortFrm(repdb) endif

: empty reportDB
repTC.empty()
repTC.edit()

delimiter = ", "
linenumber = setlines() ; calculate the line numbers for myrec

scan patTC:
 message("transferring "+string(patTC.pairDex))
 repTC.insertAfterRecord()
 repTC."freq" = patTC."freq"
 for i from 1 to tupleSize
 mpTC.locate("morphNum",patTC.(string(i)+"Tuple"))
 repTC.("morph"+string(i)) = mpTC.graf
 repTC.grString = repTC.grString + " " + mpTC.GR
 repTC.OCString = repTC.OCString + " " + mpTC.OC
 endfor
endmethod

```

```

endfor

secondLine = "" ; create the location string
scan patLctnTC FOR patLctnTC."pairdex" = patTC."pairDex":
 tempStr = String(lineNumber[patLctnTC."placeNum"])+
("+String(patLctnTC."placeNum")+")+delimiter
 secondLine = secondLine + tempStr
endScan
repTC.location = memo(secondLine)
repTC.postRecord()
endScan
repTC.close()
patTC.close()
patLctnTC.close()
mpTC.close()

sortReport(repDB)
endmethod
:|EndMethod|#Page2.RptBox.PairsRptBtn|pushButton|
:|BeginMethod|#Page2.RptBox.ReportBtn|pushButton|
:-----
: Runs the appropriate report
: cleans up temporary files
:-----
proc doReport(rName String)
 var
 patRep Report
 tmp String
 pageTitle UIObject
 endvar
 tmp = "Pattern matching - "+OpName
 if NOT patRep.load(rName)then abortFrm(rName) endif
 pageTitle.create(TextTool, 1440*3, 180, 1440*3, 360, patRep)
 pageTitle.Name = "NewTitleText"
 pageTitle.Text = tmp
 pageTitle.Visible = true

 patRep.run()
 patRep.SetTitle(tmp)
 patRep.maximize()
endproc

:-----
method pushButton(var eventInfo Event)
 switch
 case tupleSize >1 AND tupleSize < 10:
 doReport(string(tupleSize)+"morphs.rsl")
 otherwise:
 msgStop("ERROR", "Fallout - No can Do - No operation select for a report")
 endSwitch
endmethod

```

```

:|EndMethod|#Page2.RptBox.ReportBtn|pushButton|
:|BeginMethod|#Page2.#Field5|newValue|
method newValue(var eventInfo Event)
if eventInfo.reason() = EditValue then
 opName = self
 switch
 case self = "test" :
 operation = 100
 tupleSize = 0
 case self = "2 word Couples" :
 operation = 1
 tupleSize = 2
 case self = "3 word Triples" :
 operation = 2
 tupleSize = 3
 case self = "4 word Quads" :
 operation = 3
 tupleSize = 4
 case self = "A +?+ B Types" :
 operation = 6
 tupleSize = 2
 case self = "A+?+?+B Types" :
 operation = 7
 tupleSize = 2
 case self = "A+B+?+C Types" :
 operation = 8
 tupleSize = 3
 otherwise:
 operation = 0
 tupleSize = 0
 endSwitch
 switch
 case tupleSize = 2: : knew this when we selected the pattern
 PatternFILE = "twos.db"
 repdb = "2Rep.db"
 case tupleSize = 3 :
 PatternFILE = "threes.db"
 repdb = "3Rep.db"
 case tupleSize = 4 :
 PatternFILE = "fours.db"
 repdb = "4Rep.db"
 otherwise:
 msgStop("ERROR", "Fallout - No can Do - No operation select for a report")
 endSwitch

endif
endmethod
:|EndMethod|#Page2.#Field5|newValue|
:|BeginMethod|#Page2.PatternBtn|Var|
Var
 tc TCursor

```

```

A, B, ignore, C, D AryObj
genValue, genPtr, patLength, EOFptr SmallInt
patAry Array[] SmallInt
lengthA, lengthB, distance, ASIZE SmallInt
endVar
;|EndMethod|#Page2.PatternBtn|Var|

;|BeginMethod|#Page2.PatternBtn|Const|
Const
 DataFile = String("myrecen.db")
endConst
;|EndMethod|#Page2.PatternBtn|Const|
;|BeginMethod|#Page2.PatternBtn|pushButton|

: Each of the two pattern objects (the Source and the target) themselves
: consist of two array objects:
: Source = A[] + B[]
: Target = C[] + D[]
:
: 1) Look through the text for an A[] then a B[]
:
: 2) find a C[] that matches A[]
:
: 3) find a D[]
:
: 4) Compare (A[]+B[]) with (C[]+D[])
:
: 5) Look for another A[]
:

:

: Finding and posting the patterns
:

var
 Apr, Bptr, Cptr, Dptr SmallInt
endvar
:

proc noteMatch()
switch
 case tupleSize > 0: ; knew this when we selected the pattern
 post2rep(tupleSize)
 otherwise:
 msgStop("ERROR", "Fallout - No can Do - No operation select for a report")
endSwitch
endProc
:

: Array Object Procedures
:

: gets a suitable morph & loads global variables genPtr & genValue
proc getGoodMorph(ptr SmallInt) Logical
 tc.moveToRecord(ptr)
 while NOT tc.eot()

```

```

if ignore.contains(tc.morphNum) then
 tc.nextRecord() ; repeat search
else
 genValue = tc.morphNum
 genPtr = SmallInt(tc.recNo())
 return true
endif
endWhile
: msgInfo("debug","returning from getNext\n"+string(temp))
return false
endProc

proc getAryObj(x AryObj, const length SmallInt, ptr SmallInt) AryObj
var i SmallInt endVar
 x.empty()
 if getGoodMorph(ptr) then ; genPtr, genValue
 x.addlast(genPtr)
 x.addlast(genValue)
 for i from 2 to length
 if getGoodMorph(genPtr+1) then
 x.addlast(genValue)
 else
 genPtr = EOFptr ; dummy to return EOF in x[1]
 x.empty()
 quitLoop
 endif
 endFor
 x.addlast(genPtr)
else ; ary object exceeds dbase
 x.empty()
 x.addLast(EOFptr) ; return EOF in x[1]
endif
return x
endProc

proc getScnDPtr(eType logical) SmallInt
var temp SmallInt endVar
temp = calcDist(iif(etype,A[ASIZE],C[ASIZE]))
if temp = EOFptr then ; end of file ptr
 return EOFptr
else
 return (iif(etype,A[ASIZE],C[ASIZE]) +temp)
endif
endproc

proc calcdist(startptr SmallInt) SmallInt
var
 i, endPtr SmallInt
endvar

```

```

tc.moveToRecNo(startPtr) ; true
i = 0
while i < distance
 i = i + 1
 if tc.nextRecord() then
 if ignore.contains(tc."morphnum") then
 i = i - 1
 endif
 else
 return EOFptr ; eof or problem
 endif
endWhile
endPtr = smallInt(tc.RecNo())
return (endPtr - startPtr + 1)
endproc
:-----
: -----End of Array Object Procedures-----
:-----
: Array Comparison Procedures
:-----
proc compareObject() Logical
 return aryCompare(B,D)
endProc
:-----
proc aryCompare(m aryObj, n aryObj) Logical
 var i smallInt endVar

 for i from 2 to m.size()-1
 if m[i] <> n[i] then
 return false
 endif
 endFor
 return true
endProc
: -----End of Array Comparison Procedures-----
:-----
: Individual ABCD Array Procedures
:-----
: FirstObject procedures
:-----
proc getFirstObject() Logical ; Searches for, and Returns a good A & B
 if getA() then
 Aptr = A[1] + 1
 Bptr = getScnDPtr(true)
 if getB() then return true endif
 endif
 return false
endProc
:-----
proc getA() Logical
 A = getAryObj(A, lengthA, Aptr)

```

```

 return iif(A[1] = EOFptr, false, true) ; EOF - do not have a proper A
endProc

proc getB() Logical
 B = getAryObj(B, lengthB, Bptr)
 return iif(B[1] = EOFptr, false, true)
endproc

: Second Object procedures

proc getSecondObject() Logical ; Searches for, and Returns a good C & D
 if getGoodC() then
 Dptr = getScnDPtr(false)
 if getD() then return true endIf
 endIf
 return false
endProc

proc getgoodC() Logical ; Searches for, and Returns a C = A else false
 while getC()
 Cptr = Cptr + 1
 if aryCompare(A,C) then return true endIf
 endwhile
 return false
endProc

proc cStart() Logical
 tc.moveToRecNo(Cptr)
 while NOT tc.eot()
 if tc."morphNum" = A[2] then ; likely C candidate
 return true
 else
 Cptr = Cptr + 1
 tc.nextRecord()
 endIf
 endwhile
 return false
endProc

proc getC() Logical
 if cStart() then ; finds a suitable Cptr
 C = getAryObj(C, lengthA, Cptr)
 return iif(C[1] = EOFptr, false, true) ; EOF - Do not have a proper C
 endIf
 return false
endproc

proc getD() Logical
 D = getAryObj(D, lengthB, Dptr)
 return iif(D[1] = EOFptr, false, true)

```

```

endproc

: Ignore & enclitic elements procedures

proc setIgnore()
 ignore.empty()
 if msgQuestion("NewLineMarker", "Ignore the New Line markers?") = "Yes" then
 ignore.addlast(NewLineMarker)
 endif
 ignore.addlast(BlankM)
endProc

: called by ABredundant
proc matchFound(x AryObj, beginDex SmallInt) Logical
var k Smallint endvar
for k from 1 to (x.size()-2)
 if PatAry[beginDex+k] <> x[1+k] then return False endif
endFor
return True
endProc

: called by main
proc firstObjRedundant() Logical
var
 i, intervalCovered SmallInt
endvar

for i from 0 to (Smallint(number(PatAry.size())/number(patlength))-1)
 intervalCovered = i * patLength
 if matchFound(A, intervalCovered) then
 if matchFound(B, intervalCovered + lengthA) then
 message(string(a[2])+" "+string(b[2])+" redundant")
 return True ; Redundant
 endif
 endif
endFor

: add a new pattern to PatAry
for i from 1 to lengthA
 PatAry.addlast(A[1+i])
endFor
for i from 1 to lengthB
 PatAry.addlast(B[1+i])
endFor
Cptr = Aptr + 1
return false
endProc
-----*****-----
:----- Method -----
method pushButton(var eventInfo Event)

```

```

if initialize() then
 setIgnore()
 Aptr = 1
 while getFirstObject()
 if NOT firstObjRedundant() then
 message("record "+string(Aptr))
 while getSecondObject()
 if compareObject() then noteMatch() endif
 endwhile
 endif
 endwhile
endif
shutdown()
endmethod
:----- End Method -----
:|EndMethod|#Page2.PatternBtn|pushButton|
:|BeginMethod|#Page2.PatternBtn|proc|
:-----
proc setglobals(LA SmallInt, LB Smallint, DIST SmallInt)
 lengthA = LA ; length of A
 lengthB = LB ; length of B
 distance = DIST ; distance between A & B
 ASIZE = lengthA + 2 ; length of A[]
 patlength = lengthA + lengthB ; length of pattern formed by A & B
endproc
:-----
proc comfl()
 message(opName)
 if NOT pTC.open(PatternFile) then abortFrm(PatternFile) endif
 if NOT countTC.open(patLctnFILE) then abortFrm(patLctnFILE) endif
 ptc.empty()
 countTC.empty()
endproc
:-----
proc initialize() Logical
 Var flag Logical endVar
 flag = true
 if NOT tc.open(DataFile) then abortFrm(DataFile) endif
 EOFptr = SmallInt(tc.cCount("placeNum"))
 switch
 case operation = 0 : ; no operation selected
 flag = false
 message("No can Do")
 case operation = 1 :
 setglobals(1, 1, 0)
 case operation = 2 :
 setglobals(2, 1, 0)
 case operation = 3 :
 setglobals(3, 1, 0)
 case operation = 6 :
 setglobals(1, 1, 1)

```

```

case operation = 7 :
 setglobals(1, 1, 2)
 message()
case operation = 8 :
 setglobals(2, 1, 1)
otherwise:
 flag = false
 message("Fallout - No can Do")
endSwitch
if flag then comfl() endif
return flag
endproc

```

```

proc shutStd()
 pTC.close()
 countTC.close()
endProc

proc shutdown() Logical
Var flag Logical endVar
 flag = true
 tc.close()
 switch
 case operation = 0 : ; no operation selected
 flag = false
 message("ERRROR")
 case operation > 0 AND operation < 10:
 shutStd()
 otherwise:
 flag = false
 message("Fallout - No can Do")
 endSwitch
return flag
endproc

```

```

:|EndMethod|#Page2.PatternBtn|proc|

```

```

:|BeginMethod|#Page2.PatternBtn|post2rep|

```

```

; This procedure is not finished - or will it? it will not look up things like A?BC etc
; It also is a bit of a hack

```

```

proc lookUp(tple SmallInt) LongInt
 var rnum LongInt endvar
 rNum = 0
 switch
 case tple = 2 : ; pairs
 scan ptc:
 if ptc."1Tuple"=A[2] AND ptc."2Tuple"=B[2] then
 rNum = ptc.recNo()
 quitLoop
 endif
 endscan

```

```

case tple = 3 : ; triples
 scan ptc:
 if ptc."1Tuple"=A[2] AND ptc."2Tuple"=A[3] AND ptc."3Tuple"=B[2] then
 rNum = ptc.recNo()
 quitLoop
 endif
 endscan
case tple = 4 : ; quads
 scan ptc:
 if ptc."1Tuple"=A[2] AND ptc."2Tuple"=A[3] AND ptc."3Tuple"=A[4] AND ptc."4Tuple"=B[2] then
 rNum = ptc.recNo()
 quitLoop
 endif
 endscan
endSwitch
return rNum
endProc
:-----
proc newpat(tple SmallInt) SmallInt
 var i smallInt endVar
 i = iif(ptc.nrecords()=0, 1, smallint(pTC.cMax("pairDex")+1))
 pTC.Edit()
 pTC.end()
 PTC.InsertAfterRecord()
 pTC."pairDex" = i
 switch
 case tple = 2 : ; pairs
 pTC."1Tuple" = A[2]
 PTC."2Tuple" = B[2]
 case tple = 3 : ; triples
 pTC."1Tuple" = A[2]
 pTC."2Tuple" = A[3]
 pTC."3Tuple" = B[2]
 case tple = 4 : ; quads
 pTC."1Tuple" = A[2]
 pTC."2Tuple" = A[3]
 pTC."3Tuple" = A[4]
 pTC."4Tuple" = B[2]
 otherwise:
 msgStop("Error", "Illegal tuple value")
 endSwitch
 PTC."freq" = 2
 pTC.postRecord()
 pTC.endEdit()
 ptc.home() ; maybe I have to move tc
 return i
endProc
:-----
proc listPat(U Aryobj, i SmallInt)
 countTC.end()
 countTC.Edit()

```

```

countTC.InsertAfterRecord()
countTC."pairdex" = i
countTC."placenum" = U[1]
countTC.postRecord()
countTC.endEdit()
endProc

method post2rep(tple SmallInt)
var
 pairDexNum Smallint
 recnum Longint
endVar
recnum = lookUp(tple)
if recnum = 0 then
 pairDexNum = newPat(tple)
 listPat(A, pairDexNum)
 listPat(C, pairDexNum)
else
 ptc.moveToRecord(recNum)
 pTC.Edit()
 pTC."freq" = pTC."freq" + 1
 pTC.endEdit()
 pairDexNum = pTC."pairDex"
 listPat(C, pairDexNum)
endIf
endmethod
:|EndMethod|#Page2.PatternBtn|post2rep|

```

**Appendix D**

**SBTK NeyYeh with Line numbers, GR and OC Pronunciations**

1

凡 物 之 精

|      |     |     |      |
|------|-----|-----|------|
| farn | wuh | iy  | jing |
| sj   | sj  | tj+ | !sj  |
| 34   | 34  | 10  | 35   |

2

此 則 爲 生

|      |      |          |        |
|------|------|----------|--------|
| tsyy | tzer | wey      | sheng  |
| sj   | ts+k | w(r)jajs | srjeng |
| 35   | 15   | 9        | 22     |

3

下 生 五 穀

|       |        |      |     |
|-------|--------|------|-----|
| shiah | sheng  | wuu  | guu |
| gra?  | srjeng | nga? | kok |
| 12    | 22     | 12   | 19  |

4

上 爲 列 星

|        |         |      |       |
|--------|---------|------|-------|
| shang  | wei     | lieh | shing |
| djangs | w(r)jaj | ?    | seng  |
| 23     | 9       | 33   | 22    |

5

流 於 天 地 之 間

|       |    |      |          |     |      |
|-------|----|------|----------|-----|------|
| liou  | yu | tian | dih      | iy  | jian |
| C-rju | sj | hlin | lrjajs ? | tj+ | kren |
| 13    | 34 | 1    | 9        | 10  | 3    |

6

謂 之 鬼 神

|       |     |      |       |
|-------|-----|------|-------|
| wey   | iy  | goei | shern |
| wj+ts | tj+ | sj   | Ljin  |
| 5     | 10  | 34   | 1     |

7

藏 於 冑 中

|                |    |        |         |
|----------------|----|--------|---------|
| tsarng         | yu | shiong | jong    |
| htshang/hsrang | sj | !sj    | k-ljung |
| 23             | 34 | 35     | 21      |

8

|       |     |       |      |
|-------|-----|-------|------|
| 謂     | 之   | 聖     | 人    |
| wey   |     |       |      |
| wj+ts | ly  | shenq | ren  |
| 5     | tj+ | sj    | njin |
|       | 10  | 34    | 1    |

9

|      |        |      |      |
|------|--------|------|------|
| 是    | 故      | 民    | 氣    |
| shyh |        |      |      |
| sj   | guh    | min  | chih |
| 34   | ka?(s) | mjin | !sj  |
|      | 12     | 1    | 35   |

10

|     |    |
|-----|----|
| 杲   | 乎  |
| gao |    |
| sj  | hu |
| 34  | ha |
|     | 12 |

11

|    |       |    |      |
|----|-------|----|------|
| 如  | 登     | 於  | 天    |
| ru |       |    |      |
| sj | deng  | yu | tian |
| 34 | t+ing | sj | hlin |
|    | 20    | 34 | 1    |

12

|     |    |
|-----|----|
| 杳   | 乎  |
| yao |    |
| !sj | hu |
| 35  | ha |
|     | 12 |

13

|    |      |    |      |
|----|------|----|------|
| 如  | 入    | 於  | 淵    |
| ru |      |    |      |
| sj | ruh  | yu | luan |
| 34 | njup | sj | ?Win |
|    | 31   | 34 | 1    |

14

|     |    |
|-----|----|
| 淖   | 乎  |
| naw |    |
| !sj | hu |
| 35  | ha |
|     | 12 |

15

|    |      |    |      |
|----|------|----|------|
| 如  | 在    | 於  | 海    |
| ru | tzay | yu | hae  |
| sj | dz+? | sj | hm+? |
| 34 | 10   | 34 | 10   |

16

|       |    |
|-------|----|
| 卒     | 乎  |
| tzwu  | hu |
| Sljut | ha |
| 5     | 12 |

17

|    |      |    |      |
|----|------|----|------|
| 如  | 在    | 於  | 已    |
| ru | tzay | yu | yii  |
| sj | dz+? | sj | lj+? |
| 34 | 10   | 34 | 10   |

18

|      |        |      |      |     |
|------|--------|------|------|-----|
| 是    | 故      | 此    | 氣    | 也   |
| shyh | guh    | tsyy | chih | yee |
| sj   | ka?(s) | sj   | !sj  | sj  |
| 34   | 12     | 35   | 35   | 34  |

19

|     |       |      |      |        |
|-----|-------|------|------|--------|
| 不   | 可     | 止    | 以    | 力      |
| buh | kee   | iyY  | yii  | lih    |
| sj  | khaj? | lj+? | lj+? | C-rj+k |
| 34  | 9     | 10   | 10   | 15     |

20

|     |       |     |      |     |
|-----|-------|-----|------|-----|
| 而   | 可     | 安   | 以    | 德   |
| erl | kee   | an  | yii  | der |
| sj  | khaj? | ?an | lj+? | t+k |
| 34  | 9     | 3   | 10   | 15  |

21

|     |       |     |      |       |
|-----|-------|-----|------|-------|
| 不   | 可     | 呼   | 以    | 聲     |
| buh | kee   | hu  | yii  | sheng |
| sj  | khaj? | hwa | lj+? | xjeng |
| 34  | 9     | 12  | 10   | 22    |

|         |            |        |         |         |   |
|---------|------------|--------|---------|---------|---|
| 22      | 而          | 可      | 迎       | 以       | 音 |
| erl     |            |        |         |         |   |
| sj      | kee        | yng    | yii     | in      |   |
| 34      | khaɿ?      | sj     | lj+?    | ʔ(r)l+m |   |
|         | 9          | 34     | 10      | 29      |   |
| 23      | 敬          | 守      | 勿       | 失       |   |
| jinq    |            |        |         |         |   |
| krjengs | shoou      | wuh    | shy     |         |   |
| 22      | sj         | sj     | sj      |         |   |
|         | 34         | 34     | 34      |         |   |
| 24      | 是          | 謂      | 成       | 德       |   |
| shyh    |            |        |         |         |   |
| sj      | wey        | cherng | der     |         |   |
| 34      | wj+ts      | djeng  | t+k     |         |   |
|         | 5          | 22     | 15      |         |   |
| 25      | 德          | 成      | 而       | 智       | 出 |
| der     |            |        |         |         |   |
| t+k     | cherng     | erl    | jyh     | chu     |   |
| 15      | djeng      | sj     | !sj     | thjut   |   |
|         | 22         | 34     | 35      | 5       |   |
| 26      | 萬          | 物      | 果       | 得       |   |
| wann    |            |        |         |         |   |
| sj      | wuh        | guoo   | der     |         |   |
| 34      | sj         | sj     | t+k     |         |   |
|         | 34         | 34     | 15      |         |   |
| 27      | 凡          | 心      | 之       | 刑       |   |
| farn    |            |        |         |         |   |
| sj      | shin       | iy     | shyng   |         |   |
| 34      | sj+m       | tj+    | geng    |         |   |
|         | 29         | 10     | 22      |         |   |
| 28      | 自          | 充      | 自       | 盈       |   |
| tzyh    |            |        |         |         |   |
| sj      | chong      | tzyh   | yng     |         |   |
| 34      | tho/ung(?) | sj     | (l)jeng |         |   |
|         | 24         | 34     | 22      |         |   |

29

|      |   |        |      |        |
|------|---|--------|------|--------|
|      | 自 | 生      | 自    | 成      |
| tzyh |   | sheng  | tzyh | cherng |
| sj   |   | srjeng | sj   | djeng  |
| 34   |   | 22     | 34   | 22     |

30

|      |   |          |      |     |     |
|------|---|----------|------|-----|-----|
|      | 其 | 所        | 以    | 失   | 之   |
| chyi |   | suoo     | yii  | shy | ly  |
| sj   |   | s(k)rja? | lj+? | sj  | tj+ |
| 34   |   | 12       | 10   | 34  | 10  |

31

|     |   |      |        |        |
|-----|---|------|--------|--------|
|     | 必 | 以    | 憂      | 樂      |
| bih |   | yii  | iou    | leh    |
| sj  |   | lj+? | ?(r)ju | g-rawk |
| 34  |   | 10   | 13     | 28     |

32

|         |   |           |     |         |
|---------|---|-----------|-----|---------|
|         | 喜 | 怒         | 欲   | 利       |
| shii    |   | nuh       | yuh | lih     |
| x(r)j+? |   | nas V na? | sj  | C-rjits |
| 10      |   | 12        | 34  | 4       |

33

|        |   |          |        |        |
|--------|---|----------|--------|--------|
|        | 能 | 去        | 憂      | 樂      |
| neng   |   | chiuh    | iou    | leh    |
| n+(ng) |   | kh(r)jas | ?(r)ju | g-rawk |
| 20     |   | 12       | 13     | 28     |

34

|         |   |           |     |         |
|---------|---|-----------|-----|---------|
|         | 喜 | 怒         | 欲   | 利       |
| shii    |   | nuh       | yuh | lih     |
| x(r)j+? |   | nas V na? | sj  | C-rjits |
| 10      |   | 12        | 34  | 4       |

35

|      |   |     |       |       |
|------|---|-----|-------|-------|
|      | 心 | 乃   | 反     | 濟     |
| shin |   | nae | faan  | jii   |
| sj+m |   | sj  | pjan? | tsij? |
| 29   |   | 34  | 3     | 7     |

|         |      |      |        |   |
|---------|------|------|--------|---|
| 36      | 彼    | 心    | 之      | 情 |
| bii     | shin | jy   | chyng  |   |
| sj      | sj+m | tj+  | sj     |   |
| 34      | 29   | 10   | 34     |   |
| 37      | 利    | 安    | 以      | 寧 |
| lih     | an   | yii  | ning   |   |
| C-rjits | ?an  | lj+? | neng   |   |
| 4       | 3    | 10   | 22     |   |
| 38      | 勿    | 煩    | 勿      | 亂 |
| wuh     | farn | wuh  | luann  |   |
| sj      | !sj  | sj   | C-rons |   |
| 34      | 35   | 34   | 3      |   |
| 39      | 和    | 乃    | 自      | 成 |
| her     | nae  | tzyh | cherng |   |
| sj      | sj   | sj   | djeng  |   |
| 34      | 34   | 34   | 22     |   |
| 40      | 折    | 折    | 乎      |   |
| jer     | jer  | hu   |        |   |
| sj      | sj   | ha   |        |   |
| 34      | 34   | 12   |        |   |
| 41      | 如    | 在    | 於      | 側 |
| ru      | tzay | yu   | tseh   |   |
| sj      | dz+? | sj   | tsrj+k |   |
| 34      | 10   | 34   | 15     |   |
| 42      | 忽    | 忽    | 乎      |   |
| hu      | hu   | hu   |        |   |
| hmut    | hmut | ha   |        |   |
| 5       | 5    | 12   |        |   |

43

如 將 不 得。

ru

jiang buh der

sj

tsjang sj t+k

34

23 34 15

44

渺 渺 乎

meau

meau hu

!sj

!sj ha

35

35 12

45

如 窮 無 極

ru

chyong wu jyi

sj

g(r)jung sj g(r)j+k

34

21 34 15

46

此 稽 不 遠

tsyy

ji buh yeuan

sj

sj sj wjan?

35

34 34 3

47

日 用 其 德

ryh

yonq chyi der

njit

ljongs sj t+k

4

24 34 15

48

夫 道 者

fwu

daw jee

p(r)ja

lu? tja?

12

13 12

49

所 以 充 形 也

suoo

yii chong shyng yee

s(k)rja?

lj+? tho/ung(?) geng sj

12

10 24 22 34

50

|     |      |     |        |     |
|-----|------|-----|--------|-----|
| 而   | 人    | 不   | 能      | 固   |
| erl | ren  | buh | neng   | guh |
| sj  | njin | sj  | n+(ng) | kas |
| 34  | 1    | 34  | 20     | 12  |

51

|      |        |     |         |
|------|--------|-----|---------|
| 其    | 往      | 不   | 復       |
| chyi | woang  | buh | fuh     |
| sj   | wjang? | sj  | b(r)juk |
| 34   | 23     | 34  | 16      |

52

|      |         |     |      |
|------|---------|-----|------|
| 其    | 來       | 不   | 舍    |
| chyi | lai     | buh | sheh |
| sj   | C-r+(k) | sj  | sj   |
| 34   | 10      | 34  | 34   |

53

|     |    |
|-----|----|
| 謀   | 乎  |
| mou | hu |
| mj+ | ha |
| 10  | 12 |

54

|     |      |      |         |
|-----|------|------|---------|
| 莫   | 聞    | 其    | 音       |
| moh | wen  | chyi | in      |
| mak | mjun | sj   | ?(r)j+m |
| 18  | 2    | 34   | 29      |

55

|       |    |
|-------|----|
| 卒     | 乎  |
| tzwu  | hu |
| Stjut | ha |
| 5     | 12 |

56

|     |      |    |      |
|-----|------|----|------|
| 乃   | 在    | 於  | 心    |
| nae | tzay | yu | shin |
| sj  | dz+? | sj | sj+m |
| 34  | 10   | 34 | 29   |

57

|      |      |    |
|------|------|----|
| 冥    | 冥    | 乎  |
| ming | ming | hu |
| meng | meng | ha |
| 22   | 22   | 12 |

58

|     |       |      |       |
|-----|-------|------|-------|
| 不   | 見     | 其    | 形     |
| buh | jiann | chyi | shyng |
| sj  | kens  | sj   | geng  |
| 34  | 3     | 34   | 22    |

59

|    |    |    |
|----|----|----|
| 濫  | 濫  | 乎  |
| yn | yn | hu |
| sj | sj | ha |
| 34 | 34 | 12 |

60

|      |       |     |        |
|------|-------|-----|--------|
| 與    | 我     | 俱   | 生      |
| yeu  | woo   | jiu | sheng  |
| lja? | ngaj? | ?   | srjeng |
| 12   | 9     | 33  | 22     |

61

|     |       |      |       |
|-----|-------|------|-------|
| 不   | 見     | 其    | 形     |
| buh | jiann | chyi | shyng |
| sj  | kens  | sj   | geng  |
| 34  | 3     | 34   | 22    |

62

|     |      |      |       |
|-----|------|------|-------|
| 不   | 聞    | 其    | 聲     |
| buh | wen  | chyi | sheng |
| sj  | mjun | sj   | xjeng |
| 34  | 2    | 34   | 22    |

63

|     |      |      |        |
|-----|------|------|--------|
| 而   | 序    | 其    | 成      |
| erl | shih | chyi | cherng |
| sj  | sj   | sj   | djeng  |
| 34  | 34   | 34   | 22     |

|    |       |      |       |          |
|----|-------|------|-------|----------|
| 64 | 謂     | 之    | 道     |          |
|    | wey   | iy   | daw   |          |
|    | wj+ts | tj+  | lu?   |          |
|    | 5     | 10   | 13    |          |
| 65 | 凡     | 道    | 無     | 所        |
|    | farn  | daw  | wu    | suoo     |
|    | sj    | lu?  | sj    | s(k)rja? |
|    | 34    | 13   | 34    | 12       |
| 66 | 善     | 心    | 安     | 愛        |
|    | shann | shin | an    | ay       |
|    | sj    | sj+m | ?an   | ?+ts     |
|    | 34    | 29   | 3     | 5        |
| 67 | 心     | 靜    | 氣     | 理        |
|    | shin  | jinq | chih  | lii      |
|    | sj+m  | sj   | lsj   | C-rj+?   |
|    | 29    | 34   | 35    | 10       |
| 68 | 道     | 乃    | 可     | 止        |
|    | daw   | nae  | kee   | iyY      |
|    | lu?   | sj   | khaj? | tj+?     |
|    | 13    | 34   | 9     | 10       |
| 69 | 彼     | 道    | 不     | 遠        |
|    | bii   | daw  | buh   | yeuan    |
|    | sj    | lu?  | sj    | wjan?    |
|    | 34    | 13   | 34    | 3        |
| 70 | 民     | 得    | 以     | 產        |
|    | min   | der  | yii   | chaan    |
|    | mjin  | t+k  | lj+?  | lsj      |
|    | 1     | 15   | 10    | 35       |

71

彼 道 不 離

|     |     |     |        |
|-----|-----|-----|--------|
| bii | daw | buh | li     |
| sj  | lu? | sj  | C-rja? |
| 34  | 13  | 34  | 9      |

72

民 因 以 知

|      |    |      |      |
|------|----|------|------|
| min  | in | yii  | iy   |
| mjin | sj | lj+? | trje |
| 1    | 34 | 10   | 11   |

73

是 故

|      |        |
|------|--------|
| shyh | guh    |
| sj   | ka?(s) |
| 34   | 12     |

74

卒 乎 B

|       |    |       |
|-------|----|-------|
| tzwu  | hu | blank |
| Stjut | ha | ?     |
| 5     | 12 |       |

75

其 如 可 與 索

|      |    |       |      |      |
|------|----|-------|------|------|
| chyi | ru | kee   | yeu  | suoo |
| sj   | sj | khaj? | lja? | sj   |
| 34   | 34 | 9     | 12   | 34   |

76

眇 眇 乎

|      |      |    |
|------|------|----|
| meau | meau | hu |
| !sj  | !sj  | ha |
| 35   | 35   | 12 |

77

其 如 窮 無 所

|      |    |          |    |          |
|------|----|----------|----|----------|
| chyi | ru | chjong   | wu | suoo     |
| sj   | sj | g(r)jung | sj | s(k)rja? |
| 34   | 34 | 21       | 34 | 12       |

78

被 道 之 情

|     |     |     |       |
|-----|-----|-----|-------|
| bey | daw | iy  | chyng |
| sy  | lu? | tj+ | sj    |
| 34  | 13  | 10  | 34    |

79

惡 音 與 聲

|    |         |      |       |
|----|---------|------|-------|
| u  | in      | yeu  | sheng |
| sj | ?(r)j+m | tja? | xjeng |
| 34 | 29      | 12   | 22    |

80

修 心 靜 音

|       |      |      |         |
|-------|------|------|---------|
| shiou | shin | jinq | in      |
| sjjw  | sj+m | sj   | ?(r)j+m |
| 25    | 29   | 34   | 29      |

81

道 乃 可 得

|     |     |       |     |
|-----|-----|-------|-----|
| daw | nae | kee   | der |
| lu? | sj  | khaj? | t+k |
| 13  | 34  | 9     | 15  |

82

道 也 者

|     |     |      |  |
|-----|-----|------|--|
| daw | yee | jee  |  |
| lu? | sj  | tjA? |  |
| 13  | 34  | 12   |  |

83

口 之 所

|         |     |          |  |
|---------|-----|----------|--|
| koou    | iy  | suoo     |  |
| kh(r)o? | tj+ | s(k)rja? |  |
| 14      | 10  | 12       |  |

84

不 能 言 也

|     |        |       |     |
|-----|--------|-------|-----|
| buh | neng   | yan   | yee |
| sj  | n+(ng) | ngyan | sj  |
| 34  | 20     | 3     | 34  |

85

|     |     |          |
|-----|-----|----------|
| 目   | 之   | 所        |
| muh | iy  | suoo     |
| sj  | tj+ | s(k)rja? |
| 34  | 10  | 12       |

|     |        |         |     |   |
|-----|--------|---------|-----|---|
| 86  | 不      | 能       | 視   | 也 |
| buh | neng   | shyh    | yee |   |
| sj  | n+(ng) | gijj?/s | sj  |   |
| 34  | 20     | 7       | 34  |   |

|      |     |          |   |
|------|-----|----------|---|
| 87   | 耳   | 之        | 所 |
| eel  | iy  | suoo     |   |
| nj+? | tj+ | s(k)rja? |   |
| 10   | 10  | 12       |   |

|     |        |       |     |   |
|-----|--------|-------|-----|---|
| 88  | 不      | 能     | 聽   | 也 |
| buh | neng   | ting  | yee |   |
| sj  | n+(ng) | hleng | sj  |   |
| 34  | 20     | 22    | 34  |   |

|          |      |       |      |   |
|----------|------|-------|------|---|
| 89       | 所    | 以     | 修    | 心 |
| suoo     | yii  | shiou | shin |   |
| s(k)rja? | tj+? | sljiw | sj+m |   |
| 12       | 10   | 25    | 29   |   |

|     |        |       |     |   |
|-----|--------|-------|-----|---|
| 90  | 而      | 正     | 形   | 也 |
| erl | jenq   | shyng | yee |   |
| sj  | tjengs | geng  | sj  |   |
| 34  | 22     | 22    | 34  |   |

|      |     |          |   |
|------|-----|----------|---|
| 91   | 人   | 之        | 所 |
| ren  | iy  | suoo     |   |
| njin | tj+ | s(k)rja? |   |
| 1    | 10  | 12       |   |

|     |      |      |
|-----|------|------|
| 失   | 以    | 死    |
| shy | yii  | syy  |
| sj  | lj+? | sjj? |
| 34  | 10   | 7    |

93

|          |     |      |        |     |
|----------|-----|------|--------|-----|
| 所        | 得   | 以    | 生      | 也   |
| suoo     | der | yii  | sheng  | yee |
| s(k)rja? | t+k | lj+? | srjeng | sj  |
| 12       | 15  | 10   | 22     | 34  |

94

|           |     |          |
|-----------|-----|----------|
| 事         | 之   | 所        |
| shyh      | iy  | suoo     |
| hsrj+?(s) | lj+ | s(k)rja? |
| 10        | 10  | 12       |

95

|     |      |        |
|-----|------|--------|
| 失   | 以    | 敗      |
| shy | yii  | bay    |
| sj  | lj+? | hprats |
| 34  | 10   | 6      |

96

|          |     |      |        |     |
|----------|-----|------|--------|-----|
| 所        | 得   | 以    | 成      | 也   |
| suoo     | der | yii  | cherng | yee |
| s(k)rja? | t+k | lj+? | djeng  | sj  |
| 12       | 15  | 10   | 22     | 34  |

97

|     |     |
|-----|-----|
| 凡   | 道   |
| fam | daw |
| sj  | lu? |
| 34  | 13  |

98

|    |     |    |      |
|----|-----|----|------|
| 無  | 根   | 無  | 莖    |
| wu | gen | wu | jing |
| sj | lsj | sj | !sj  |
| 34 | 35  | 34 | 35   |

99

|    |      |    |      |
|----|------|----|------|
| 無  | 葉    | 無  | 榮    |
| wu | yeh  | wu | rong |
| sj | ljap | sj | ?    |
| 34 | 32   | 34 | 33   |

100

|      |     |      |        |
|------|-----|------|--------|
| 萬    | 物   | 以    | 生      |
| wann | wuh | yii  | sheng  |
| sj   | sj  | lj+? | srjeng |
| 34   | 34  | 10   | 22     |

101

|      |     |      |        |
|------|-----|------|--------|
| 萬    | 物   | 以    | 成      |
| wann | wuh | yii  | cherng |
| sj   | sj  | lj+? | djeng  |
| 34   | 34  | 10   | 22     |

102

|           |     |     |     |
|-----------|-----|-----|-----|
| 命         | 之   | 曰   | 道   |
| minq      | iy  | iue | daw |
| mrjing(s) | tj+ | sj  | lu? |
| 1         | 10  | 34  | 13  |

103

|      |      |        |
|------|------|--------|
| 天    | 主    | 正      |
| tian | juu  | jenq   |
| hlin | tjo? | tjengs |
| 1    | 14   | 22     |

104

|          |      |        |
|----------|------|--------|
| 地        | 主    | 平      |
| dih      | juu  | pyng   |
| lrjajs ? | tjo? | brjeng |
| 9        | 14   | 22     |

105

|      |      |     |      |
|------|------|-----|------|
| 人    | 主    | 安   | 靜    |
| ren  | juu  | an  | jinq |
| njin | tjo? | ?an | sj   |
| 1    | 14   | 3   | 34   |

106

|       |        |      |        |
|-------|--------|------|--------|
| 春     | 秋      | 冬    | 夏      |
| chuen | chiou  | dong | shiah  |
| thjun | tshjiw | tung | g/Hra? |
| 2     | 25     | 21   | 12     |

107

|      |     |        |     |
|------|-----|--------|-----|
| 天    | 之   | 時      | 也   |
| fian | iy  | shyr   | yee |
| hlin | tj+ | dj+(?) | sj  |
| 1    | 10  | 10     | 34  |

108

|       |         |         |     |
|-------|---------|---------|-----|
| 山     | 陵       | 川       | 谷   |
| shan  | ling    | chuan   | guu |
| srjan | b-rj+ng | KHju/on | kok |
| 3     | 20      | 2       | 19  |

109

|          |     |     |     |
|----------|-----|-----|-----|
| 地        | 之   | 枝   | 也   |
| dih      | iy  | iy  | yee |
| lrjajs ? | tj+ | kje | sj  |
| 9        | 10  | 11  | 34  |

110

|         |           |        |      |
|---------|-----------|--------|------|
| 喜       | 怒         | 取      | 予    |
| shii    | nuh       | cheu   | yeu  |
| x(r)j+? | nas V na? | tshjo? | lja? |
| 10      | 12        | 14     | 12   |

111

|      |     |     |     |
|------|-----|-----|-----|
| 人    | 之   | 謀   | 也   |
| ren  | iy  | mou | yee |
| njin | tj+ | mj+ | sj  |
| 1    | 10  | 10  | 34  |

112

|      |        |
|------|--------|
| 是    | 故      |
| shyh | guh    |
| sj   | ka?(s) |
| 34   | 12     |

113

|       |      |
|-------|------|
| 聖     | 人    |
| shenq | ren  |
| sj    | njin |
| 34    | 1    |

|      |        |   |
|------|--------|---|
| 114  | 與      | 時 |
| yeu  | shyr   |   |
| lja? | dj+(?) |   |
| 12   | 10     |   |

|        |     |     |      |   |
|--------|-----|-----|------|---|
| 115    | 變   | 而   | 不    | 化 |
| biann  | erl | buh | huah |   |
| prjons | sj  | sj  | !sj  |   |
| 3      | 34  | 34  | 35   |   |

|        |     |   |
|--------|-----|---|
| 116    | 從   | 物 |
| tsornq | wuh |   |
| dzjong | sj  |   |
| 24     | 34  |   |

|       |     |     |     |   |
|-------|-----|-----|-----|---|
| 117   | B   | 而   | 不   | 移 |
| blank | erl | buh | yi  |   |
| ?     | sj  | sj  | !sj |   |
|       | 34  | 34  | 35  |   |

|        |        |   |
|--------|--------|---|
| 118    | 能      | 正 |
| neng   | jenq   |   |
| n+(ng) | tjengs |   |
| 20     | 22     |   |

|        |      |   |
|--------|------|---|
| 119    | 能    | 靜 |
| neng   | jinq |   |
| n+(ng) | sj   |   |
| 20     | 34   |   |

120

然 后 能 定

|      |        |        |       |
|------|--------|--------|-------|
| ran  | how    | neng   | dinq  |
| njan | g(r)o? | n+(ng) | dengs |
| 3    | 14     | 20     | 22    |

121

定 心 在 中

|       |      |      |         |
|-------|------|------|---------|
| dinq  | shin | tzay | jong    |
| dengs | sj+m | dz+? | k-ljung |
| 22    | 29   | 10   | 21      |

122

耳 目 聰 明

|      |     |        |        |
|------|-----|--------|--------|
| eel  | muh | tsong  | ming   |
| nj+? | sj  | tshong | mrjang |
| 10   | 34  | 24     | 23     |

123

四 枝 堅 固

|            |     |      |     |
|------------|-----|------|-----|
| syh        | iy  | jian | guh |
| s(p)jij/ts | kje | kin  | kas |
| 4          | 11  | 1    | 12  |

124

可 以 爲 精 舍

|       |      |         |      |      |
|-------|------|---------|------|------|
| kee   | yii  | wei     | jing | sheh |
| khaj? | lj+? | w(r)jaj | !sj  | sj   |
| 9     | 10   | 9       | 35   | 34   |

125

精 也 者

|      |     |      |
|------|-----|------|
| jing | yee | jee  |
| !sj  | sj  | tjA? |
| 35   | 34  | 12   |

126

氣 之 精 者 也

|      |     |      |      |     |
|------|-----|------|------|-----|
| chih | ly  | jing | jee  | yee |
| !sj  | tj+ | !sj  | tjA? | sj  |
| 35   | 10  | 35   | 12   | 34  |

127

氣

chih

!sj

35

128

道

乃

生

daw

nae

sheng

lu?

sj

srjeng

13

34

22

129

生

乃

思

sheng

nae

sy

srjeng

sj

sj+

22

34

10

130

思

乃

知

sy

nae

iy

sj+

sj

trje

10

34

11

131

知

乃

止

矣

iy

nae

jyy

yii

trje

sj

tj+?

hj+?

11

34

10

10

132

凡

心

之

形

farn

shin

iy

shyng

sj

sj+m

tj+

geng

34

29

10

22

133

過

知

失

生

guoh

iy

shy

sheng

sj

trje

sj

srjeng

34

11

34

22

134

|      |     |        |      |
|------|-----|--------|------|
| 一    | 物   | 能      | 化    |
| i    | wuh | neng   | huah |
| ?jit | sj  | n+(ng) | !sj  |
| 4    | 34  | 20     | 35   |

135

|       |     |       |
|-------|-----|-------|
| 謂     | 之   | 神     |
| wey   | jy  | shern |
| wj+!s | tj+ | Ljin  |
| 5     | 10  | 1     |

136

|      |           |        |        |
|------|-----------|--------|--------|
| 一    | 事         | 能      | 變      |
| i    | shyh      | neng   | biann  |
| ?jit | hsrj+?(s) | n+(ng) | prjons |
| 4    | 10        | 20     | 3      |

137

|       |     |     |
|-------|-----|-----|
| 謂     | 之   | 智   |
| wey   | jy  | jyh |
| wj+!s | tj+ | !sj |
| 5     | 10  | 35  |

138

|      |     |         |      |
|------|-----|---------|------|
| 化    | 不   | 易       | 氣    |
| huah | buh | yih     | chih |
| !sj  | sj  | !jek[s] | !sj  |
| 35   | 34  | 17      | 35   |

139

|        |     |         |     |
|--------|-----|---------|-----|
| 變      | 不   | 易       | 智   |
| biann  | buh | yih     | jyh |
| prjons | sj  | !jek[s] | !sj |
| 3      | 34  | 17      | 35  |

140

|     |     |      |     |
|-----|-----|------|-----|
| 惟   | 執   | 一    | 之   |
| wei | jyr | i    | jy  |
| wjj | sj  | ?jit | tj+ |
| 7   | 34  | 4    | 10  |

141

|      |       |        |         |      |    |
|------|-------|--------|---------|------|----|
| 君    | 子     | 能      | 爲       | 此    | 乎  |
| jiun | tzyy  | neng   | wei     | tsyy | hu |
| kjun | tsj+? | n+(ng) | w(r)jaj | sj   | ha |
| 2    | 10    | 20     | 9       | 35   | 12 |

142

|     |      |     |     |
|-----|------|-----|-----|
| 執   | 一    | 不   | 失   |
| lyr | i    | buh | shy |
| sj  | ?jit | sj  | sj  |
| 34  | 4    | 34  | 34  |

143

|        |      |      |     |
|--------|------|------|-----|
| 能      | 君    | 萬    | 物   |
| neng   | jiun | wann | wuh |
| n+(ng) | kjun | sj   | sj  |
| 20     | 2    | 34   | 34  |

144

|      |       |       |     |
|------|-------|-------|-----|
| 君    | 子     | 使     | 物   |
| jiun | tzyy  | shyy  | wuh |
| kjun | tsj+? | srj+? | sj  |
| 2    | 10    | 10    | 34  |

145

|     |         |     |       |
|-----|---------|-----|-------|
| 不   | 爲       | 物   | 使     |
| buh | wei     | wuh | shyy  |
| sj  | w(r)jaj | sj  | srj+? |
| 34  | 9       | 34  | 10    |

146

|     |      |     |        |
|-----|------|-----|--------|
| 得   | 一    | 之   | 理      |
| der | i    | iy  | lii    |
| t+k | ?jit | tj+ | C-rj+? |
| 15  | 4    | 10  | 10     |

147

|      |      |      |    |         |
|------|------|------|----|---------|
| 治    | 心    | 在    | 於  | 中       |
| jyh  | shin | tzay | yu | jong    |
| lrj+ | sj+m | dz+? | sj | k-ljung |
| 10   | 29   | 10   | 34 | 21      |

148

治 言 出 於 口

|      |       |       |    |         |
|------|-------|-------|----|---------|
| jyh  | yan   | chu   | yu | koou    |
| lrj+ | ngyan | thjut | sj | kh(r)o? |
| 10   | 3     | 5     | 34 | 14      |

治 事 加 於 人

|      |           |      |    |      |
|------|-----------|------|----|------|
| jyh  | shyh      | jia  | yu | ren  |
| lrj+ | hsrj+?(s) | kraj | sj | njin |
| 10   | 10        | 9    | 34 | 1    |

150

然 則 天 下 治 矣

|      |      |      |       |      |      |
|------|------|------|-------|------|------|
| ran  | tzer | tian | shiah | jyh  | yii  |
| njan | ts+k | hlin | gra?  | lrj+ | hj+? |
| 3    | 15   | 1    | 12    | 10   | 10   |

151

一 言 得

|      |       |     |
|------|-------|-----|
| i    | yan   | der |
| ?jit | ngyan | t+k |
| 4    | 3     | 15  |

152

而 天 下 服

|     |      |       |      |
|-----|------|-------|------|
| erl | tian | shiah | fwu  |
| sj  | hlin | gra?  | bj+k |
| 34  | 1    | 12    | 15   |

153

一 言 定

|      |       |       |
|------|-------|-------|
| i    | yan   | dinq  |
| ?jit | ngyan | dengs |
| 4    | 3     | 22    |

154

而 天 下 聽

|     |      |       |       |
|-----|------|-------|-------|
| erl | tian | shiah | ting  |
| sj  | hlin | gra?  | hleng |
| 34  | 1    | 12    | 22    |

155

公 之 謂 也

|      |     |       |     |
|------|-----|-------|-----|
| gong | ly  | wey   | yee |
| kong | tj+ | wj+ts | sj  |
| 24   | 10  | 5     | 34  |
| 156  |     |       |     |

形 不 正

|       |     |        |
|-------|-----|--------|
| shyng | buh | jenq   |
| geng  | sj  | tjengs |
| 22    | 34  | 22     |

157

德 不 來

|     |     |         |
|-----|-----|---------|
| der | buh | lai     |
| t+k | sj  | C-r+(k) |
| 15  | 34  | 10      |

158

中 不 靜

|         |     |      |
|---------|-----|------|
| jong    | buh | jinq |
| k-ljung | sj  | sj   |
| 21      | 34  | 34   |

159

心 不 治

|      |     |     |
|------|-----|-----|
| shin | buh | jyh |
| sj+m | sj  | lj+ |
| 29   | 34  | 10  |

160

正 形 攝 德

|        |       |      |     |
|--------|-------|------|-----|
| jenq   | shyng | sheh | der |
| tjengs | geng  | sj   | t+k |
| 22     | 22    | 34   | 15  |

161

天 仁 地 義

|      |      |         |     |
|------|------|---------|-----|
| tian | ren  | dih     | yih |
| hlin | njin | ljajs ? | sj  |
| 1    | 1    | 9       | 34  |

162

則

|      |    |      |     |      |       |
|------|----|------|-----|------|-------|
| tzer | 淫  | 然    | 而   | 自    | 至     |
| ts+k | yn | ran  | erl | tzyh | jyh   |
| 15   | sj | njan | sj  | sj   | tjits |
|      | 34 | 3    | 34  | 34   | 4     |

|       |        |     |         |   |
|-------|--------|-----|---------|---|
| 163   | 神      | 明   | 之       | 極 |
| shern | ming   | iy  | iyi     |   |
| Ljin  | mrjang | tj+ | g(r)j+k |   |
| 1     | 23     | 10  | 15      |   |

|       |    |      |      |     |   |
|-------|----|------|------|-----|---|
| 164   | 照  | 乎    | 知    | 萬   | 物 |
| jaw   | hu | iy   | wann | wuh |   |
| tjaws | ha | lrje | sj   | sj  |   |
| 26    | 12 | 11   | 34   | 34  |   |

|         |     |       |     |      |   |
|---------|-----|-------|-----|------|---|
| 165     | 中   | 義     | 守   | 不    | 忒 |
| jong    | yih | shoou | buh | feh  |   |
| k-ljung | sj  | sj    | sj  | hl+k |   |
| 21      | 34  | 34    | 34  | 15   |   |

|     |      |     |        |      |   |
|-----|------|-----|--------|------|---|
| 166 | 不    | 以   | 物      | 亂    | 官 |
| buh | yii  | wuh | luann  | guan |   |
| sj  | lj+? | sj  | C-rons | !sj  |   |
| 34  | 10   | 34  | 3      | 35   |   |

|     |      |      |        |      |   |
|-----|------|------|--------|------|---|
| 167 | 不    | 以    | 官      | 亂    | 心 |
| buh | yii  | guan | luann  | shin |   |
| sj  | lj+? | !sj  | C-rons | sj+m |   |
| 34  | 10   | 35   | 3      | 29   |   |

|      |       |         |     |   |
|------|-------|---------|-----|---|
| 168  | 是     | 謂       | 中   | 得 |
| shyh | wey   | jong    | der |   |
| sj   | wj+ts | k-ljung | t+k |   |
| 34   | 5     | 21      | 15  |   |

|     |   |
|-----|---|
| 169 | 有 |
|-----|---|

|      |       |      |      |      |
|------|-------|------|------|------|
| yeou | 神     | 自    | 在    | 身    |
| wj+? | shern | tzyh | tzay | shen |
| 10   | Ljin  | sj   | dz+? | hjin |
|      | 1     | 34   | 10   | 1    |

170

|      |        |      |         |
|------|--------|------|---------|
| —    | 往      | —    | 來       |
| i    | woang  | i    | lai     |
| ?jit | wjang? | ?jit | C-r+(k) |
| 4    | 23     | 4    | 10      |

171

|     |     |        |     |
|-----|-----|--------|-----|
| 莫   | 之   | 能      | 思   |
| moh | iy  | neng   | sy  |
| mak | tj+ | n+(ng) | sj+ |
| 18  | 10  | 20     | 10  |

172

|     |     |     |        |
|-----|-----|-----|--------|
| 失   | 之   | 必   | 亂      |
| shy | iy  | bih | luann  |
| sj  | tj+ | sj  | C-rans |
| 34  | 10  | 34  | 3      |

173

|     |     |     |      |
|-----|-----|-----|------|
| 得   | 之   | 必   | 治    |
| der | iy  | bih | jyh  |
| t+k | tj+ | sj  | lrj+ |
| 15  | 10  | 34  | 10   |

174

|         |      |      |      |
|---------|------|------|------|
| 敬       | 除    | 其    | 舍    |
| jinq    | chwu | chyi | sheh |
| krjengs | sj   | sj   | sj   |
| 22      | 34   | 34   | 34   |

175

|      |        |      |         |
|------|--------|------|---------|
| 精    | 將      | 自    | 來       |
| jing | jiang  | tzyh | lai     |
| !sj  | tsjang | sj   | C-r+(k) |
| 35   | 23     | 34   | 10      |

176

精

|      |        |     |     |
|------|--------|-----|-----|
| jing | 想      | 思   | 之   |
| lsj  | sheang | sy  | iy  |
| 35   | lsj    | sj+ | tj+ |
|      | 35     | 10  | 10  |

177

|      |       |      |     |
|------|-------|------|-----|
| 寧    | 念     | 治    | 之   |
| ning | niann | jyh  | iy  |
| neng | sj    | lrj+ | tj+ |
| 22   | 34    | 10   | 10  |

178

|          |         |        |         |
|----------|---------|--------|---------|
| 嚴        | 容       | 畏      | 敬       |
| yan      | rong    | wey    | jinq    |
| ng(r)jam | (l)jong | ?uj(s) | krjengs |
| 30       | 24      | 8      | 22      |

179

|      |        |       |       |
|------|--------|-------|-------|
| 精    | 將      | 至     | 定     |
| jing | jiang  | jyh   | dinq  |
| lsj  | tsjang | tjits | dengs |
| 35   | 23     | 4     | 22    |

180

|     |     |     |     |          |
|-----|-----|-----|-----|----------|
| 得   | 之   | 而   | 勿   | 捨        |
| der | iy  | erl | wuh | shee     |
| t+k | tj+ | sj  | sj  | hijA(k)? |
| 15  | 10  | 34  | 34  | 12       |

181

|      |     |     |    |
|------|-----|-----|----|
| 耳    | 目   | 不   | 淫  |
| eel  | muh | buh | yn |
| nj+? | sj  | sj  | sj |
| 10   | 34  | 34  | 34 |

182

|      |    |      |      |
|------|----|------|------|
| 心    | 無  | 他    | 圖    |
| shin | wu | ta   | twu  |
| sj+m | sj | hlaj | d/la |
| 29   | 34 | 9    | 12   |

183

正

|        |      |      |         |
|--------|------|------|---------|
| jəŋq   | 心    | 在    | 中       |
| tjəŋgs | shin | tzay | joŋg    |
| 22     | sj+m | dz+? | k-ljuŋg |
|        | 29   | 10   | 21      |

184

|      |     |     |      |
|------|-----|-----|------|
| 萬    | 物   | 得   | 度    |
| wann | wuh | der | duh  |
| sj   | sj  | t+k | laks |
| 34   | 34  | 15  | 18   |

185

|     |      |      |       |
|-----|------|------|-------|
| 道   | 滿    | 天    | 下     |
| daw | maan | tian | shiah |
| lu? | !sj  | hlin | gra?  |
| 13  | 35   | 1    | 12    |

186

|     |      |      |          |
|-----|------|------|----------|
| 普   | 在    | 民    | 所        |
| puu | tzay | min  | suoo     |
| !sj | dz+? | mjin | s(k)rja? |
| 35  | 10   | 1    | 12       |

187

|      |     |        |      |     |
|------|-----|--------|------|-----|
| 民    | 不   | 能      | 知    | 也   |
| min  | buh | nəŋg   | iy   | yee |
| mjin | sj  | n+(ŋg) | trje | sj  |
| 1    | 34  | 20     | 11   | 34  |

188

|      |       |     |      |
|------|-------|-----|------|
| 一    | 言     | 之   | 解    |
| i    | yan   | iy  | jiee |
| ?jit | ngyan | tj+ | sj   |
| 4    | 3     | 10  | 34   |

189

|        |      |    |      |
|--------|------|----|------|
| 上      | 察    | 於  | 天    |
| shanq  | char | yu | tian |
| djangs | ?    | sj | hlin |
| 23     | 33   | 34 | 1    |

190

下

|       |         |    |          |
|-------|---------|----|----------|
| shiah | 極       | 於  | 地        |
| gra?  |         |    |          |
| 12    | iyi     | yu | dih      |
|       | g(r)j+k | sj | lɾjajs ? |
|       | 15      | 34 | 9        |

191

|      |      |      |     |
|------|------|------|-----|
| 蟠    | 滿    | 九    | 州   |
| parn |      |      |     |
| !sj  | maan | jeou | jou |
| 35   | !sj  | sj   | !sj |
|      | 35   | 34   | 35  |

192

|     |       |      |     |
|-----|-------|------|-----|
| 何   | 謂     | 解    | 之   |
| her |       |      |     |
| gaj | wey   | jiee | iy  |
| 9   | wj+ts | sj   | tj+ |
|     | 5     | 34   | 10  |

193

|      |    |      |     |
|------|----|------|-----|
| 在    | 於  | 心    | 安   |
| tzay |    |      |     |
| dz+? | yu | shin | an  |
| 10   | sj | sj+m | ?an |
|      | 34 | 29   | 3   |

194

|       |      |      |
|-------|------|------|
| 我     | 心    | 治    |
| woo   |      |      |
| ngaj? | shin | iyh  |
| 9     | sj+m | lɾj+ |
|       | 29   | 10   |

195

|      |     |      |
|------|-----|------|
| 官    | 乃   | 治    |
| guan |     |      |
| !sj  | nae | iyh  |
| 35   | sj  | lɾj+ |
|      | 34  | 10   |

196

|       |      |     |
|-------|------|-----|
| 我     | 心    | 安   |
| woo   |      |     |
| ngaj? | shin | an  |
| 9     | sj+m | ?an |
|       | 29   | 3   |

197

官

|         |      |                |         |      |      |      |
|---------|------|----------------|---------|------|------|------|
| guan    | 乃    | 安              |         |      |      |      |
| !sj     |      |                |         |      |      |      |
| 35      | nae  | an             |         |      |      |      |
|         | sj   | ?an            |         |      |      |      |
|         | 34   | 3              |         |      |      |      |
| 198     |      |                |         |      |      |      |
| 治       | 之    | 者              | 心       | 也    |      |      |
| jyh     | jy   | jee            | shin    | yee  |      |      |
| !rj+    | tj+  | tjA?           | sj+m    | sj   |      |      |
| 10      | 10   | 12             | 29      | 34   |      |      |
| 199     |      |                |         |      |      |      |
| 安       | 之    | 者              | 心       | 也    |      |      |
| an      | jy   | jee            | shin    | yee  |      |      |
| ?an     | tj+  | tjA?           | sj+m    | sj   |      |      |
| 3       | 10   | 12             | 29      | 34   |      |      |
| 200     |      |                |         |      |      |      |
| 心       | 以    | 藏              | 心       |      |      |      |
| shin    | yii  | tsarng         | shin    |      |      |      |
| sj+m    | tj+? | htshang/hsrang | sj+m    |      |      |      |
| 29      | 10   | 23             | 29      |      |      |      |
| 201     |      |                |         |      |      |      |
| 心       | 之    | 中              | 又       | 有    | 心    | 馬    |
| shin    | jy   | jong           | yow     | yeou | shin | maa  |
| sj+m    | tj+  | k-ljung        | wj+(k)s | wj+? | sj+m | mra? |
| 29      | 10   | 21             | 15      | 10   | 29   | 12   |
| 202     |      |                |         |      |      |      |
| 彼       | 心    | 之              | 心       |      |      |      |
| bii     | shin | jy             | shin    |      |      |      |
| sj      | sj+m | tj+            | sj+m    |      |      |      |
| 34      | 29   | 10             | 29      |      |      |      |
| 203     |      |                |         |      |      |      |
| 音       | 以    | 先              | 言       |      |      |      |
| in      | yii  | shian          | yan     |      |      |      |
| ?(r)j+m | tj+? | sj             | ngyan   |      |      |      |
| 29      | 10   | 34             | 3       |      |      |      |
| 204     |      |                |         |      |      |      |

|         |      |        |       |
|---------|------|--------|-------|
| 音       | 然    | 后      | 形     |
| in      | ran  | how    | shyng |
| ?(r)j+m | njan | g(r)o? | geng  |
| 29      | 3    | 14     | 22    |
| 205     |      |        |       |

|       |      |        |       |
|-------|------|--------|-------|
| 形     | 然    | 后      | 言     |
| shyng | ran  | how    | yan   |
| geng  | njan | g(r)o? | ngyan |
| 22    | 3    | 14     | 3     |

206

|       |      |        |       |
|-------|------|--------|-------|
| 言     | 然    | 后      | 使     |
| yan   | ran  | how    | shyy  |
| ngyan | njan | g(r)o? | srj+? |
| 3     | 3    | 14     | 10    |

207

|       |      |        |      |
|-------|------|--------|------|
| 使     | 然    | 后      | 治    |
| shyy  | ran  | how    | jyh  |
| srj+? | njan | g(r)o? | lrj+ |
| 10    | 3    | 14     | 10   |

208

|     |      |     |        |
|-----|------|-----|--------|
| 不   | 治    | 必   | 亂      |
| buh | jyh  | bih | luann  |
| sj  | lrj+ | sj  | C-rons |
| 34  | 10   | 34  | 3      |

209

|        |     |      |
|--------|-----|------|
| 亂      | 乃   | 死    |
| luann  | nae | syy  |
| C-rons | sj  | sjj? |
| 3      | 34  | 7    |

210

|      |       |      |        |
|------|-------|------|--------|
| 精    | 存     | 自    | 生      |
| jing | tswen | tzyh | sheng  |
| !sj  | dz+n  | sj   | srjeng |
| 35   | 2     | 34   | 22     |

211

其 外 安 榮

|      |        |     |      |
|------|--------|-----|------|
| chyi | way    | an  | rong |
| sj   | ngWats | ?an | ?    |
| 34   | 6      | 3   | 33   |

212

內 藏

|      |                |
|------|----------------|
| ney  | tsang          |
| nups | htshang/hsrang |
| 31   | 23             |

213

以 爲 泉 原

|      |         |        |        |
|------|---------|--------|--------|
| yii  | wei     | chyuan | yuan   |
| lj+? | w(r)jaj | SgWjan | ngWjan |
| 10   | 9       | 3      | 3      |

214

浩 然 和 平

|     |      |     |        |
|-----|------|-----|--------|
| haw | ran  | her | pyng   |
| sj  | njan | sj  | brjeng |
| 34  | 3    | 34  | 22     |

215

以 爲 氣 淵

|      |         |      |      |
|------|---------|------|------|
| yii  | wei     | chih | iuan |
| lj+? | w(r)jaj | !sj  | ?WIn |
| 10   | 9       | 35   | 1    |

216

淵 之 不 迺

|      |     |     |     |
|------|-----|-----|-----|
| iuan | iy  | buh | her |
| ?WIn | tj+ | sj  | !sj |
| 1    | 10  | 34  | 35  |

217

四 體 乃 固

|            |       |     |     |
|------------|-------|-----|-----|
| syh        | tii   | nae | guh |
| s(p)jij/ts | hrij? | sj  | kas |
| 4          | 7     | 34  | 12  |

218

泉

|        |     |     |      |
|--------|-----|-----|------|
| chyuan | 之   | 不   | 竭    |
| SgWjan |     |     |      |
| 3      | iy  | buh | jye  |
|        | tj+ | sj  | gjat |
|        | 10  | 34  | 6    |

219

|      |       |      |      |
|------|-------|------|------|
| 九    | 覈     | 遂    | 通    |
| jeou | chiaw | suey | tong |
| sj   | !sj   | zuts | !sj  |
| 34   | 35    | 5    | 35   |

220

|     |        |          |      |          |
|-----|--------|----------|------|----------|
| 乃   | 能      | 窮        | 天    | 地        |
| nae | neng   | chyong   | tian | dih      |
| sj  | n+(ng) | g(r)jung | hlin | lrjajs ? |
| 34  | 20     | 21       | 1    | 9        |

221

|     |            |      |
|-----|------------|------|
| 被   | 四          | 海    |
| bey | syh        | hae  |
| sy  | s(p)jij/ts | hm+? |
| 34  | 4          | 10   |

222

|         |    |      |          |
|---------|----|------|----------|
| 中       | 無  | 惑    | 意        |
| jong    | wu | huoh | yih      |
| k-ljung | sj | !sj  | ?(r)j+ks |
| 21      | 34 | 35   | 15       |

223

|        |    |         |      |
|--------|----|---------|------|
| 外      | 無  | 邪       | 齷    |
| way    | wu | shye    | tzai |
| ngWats | sj | z(ng)jA | sj   |
| 6      | 34 | 12      | 34   |

224

|      |        |    |         |
|------|--------|----|---------|
| 心    | 全      | 於  | 中       |
| shin | chyuan | yu | jong    |
| sj+m | !sj    | sj | k-ljung |
| 29   | 35     | 34 | 21      |

225

形

|       |        |    |        |
|-------|--------|----|--------|
| shyng | 全      | 於  | 外      |
| geng  | chyuan | yu | way    |
| 22    | !sj    | sj | ngWats |
|       | 35     | 34 | 6      |

226

|     |       |      |      |
|-----|-------|------|------|
| 不   | 逢     | 天    | 畱    |
| buh | ferng | fian | tzai |
| sj  | sj    | hlin | sj   |
| 34  | 34    | 1    | 34   |

227

|     |     |      |         |
|-----|-----|------|---------|
| 不   | 遇   | 人    | 害       |
| buh | yuh | ren  | hay     |
| sj  | sj  | njin | Hkat(s) |
| 34  | 34  | 1    | 6       |

228

|       |     |       |      |
|-------|-----|-------|------|
| 謂     | 之   | 聖     | 人    |
| wey   | jy  | shenq | ren  |
| wj+ts | tj+ | sj    | njin |
| 5     | 10  | 34    | 1    |

229

|      |        |        |      |
|------|--------|--------|------|
| 人    | 能      | 正      | 靜    |
| ren  | neng   | jenq   | jinq |
| njin | n+(ng) | tjengs | sj   |
| 1    | 20     | 22     | 34   |

230

|         |      |       |       |
|---------|------|-------|-------|
| 皮       | 膚    | 裕     | 寬     |
| pyi     | fu   | yuh   | kuan  |
| b(r)jaj | prja | ljoks | kWhan |
| 9       | 12   | 19    | 3     |

231

|      |     |        |        |
|------|-----|--------|--------|
| 耳    | 目   | 聰      | 明      |
| eel  | muh | tsong  | ming   |
| nj+? | sj  | tshong | mrjang |
| 10   | 34  | 24     | 23     |

232

筋

|     |       |     |     |        |
|-----|-------|-----|-----|--------|
| jín | 信     | 而   | 骨   | 強      |
| !sj | shinn | erl | guu | chyang |
| 35  | ?     | sj  | !sj | !sj    |
|     | 33    | 34  | 35  | 35     |

233

|     |        |     |      |      |
|-----|--------|-----|------|------|
| 乃   | 能      | 戴   | 大    | 圓    |
| nae | neng   | day | dah  | yuan |
| sj  | n+(ng) | !sj | lats | !sj  |
| 34  | 20     | 35  | 6    | 35   |

234

|     |     |      |       |
|-----|-----|------|-------|
| 而   | 履   | 大    | 方     |
| erl | leu | dah  | fang  |
| sj  | sj  | lats | pjang |
| 34  | 34  | 6    | 23    |

235

|       |    |      |         |
|-------|----|------|---------|
| 鑿     | 於  | 大    | 清       |
| jiann | yu | dah  | ching   |
| ?     | sj | lats | tshjeng |
| 33    | 34 | 6    | 22      |

236

|         |    |      |        |
|---------|----|------|--------|
| 視       | 於  | 大    | 明      |
| shyh    | yu | dah  | ming   |
| gijj?/s | sj | lats | mrjang |
| 7       | 34 | 6    | 23     |

237

|         |       |    |      |
|---------|-------|----|------|
| 敬       | 慎     | 無  | 忒    |
| jinq    | shenn | wu | teh  |
| krjengs | sj    | sj | hl+k |
| 22      | 34    | 34 | 15   |

238

|      |      |      |     |
|------|------|------|-----|
| 日    | 新    | 其    | 德   |
| ryh  | shin | chyi | der |
| njit | sjin | sj   | t+k |
| 4    | 1    | 34   | 15  |

239

編

|       |      |      |       |
|-------|------|------|-------|
| biann | 知    | 天    | 下     |
| sj    |      |      |       |
| 34    | iy   | tian | shiah |
|       | lrje | hlin | gra?  |
|       | 11   | 1    | 12    |

240

|          |    |            |         |
|----------|----|------------|---------|
| 窮        | 於  | 四          | 極       |
| chyong   | yu | syh        | iyi     |
| g(r)jung | sj | s(p)jij/ts | g(r)j+k |
| 21       | 34 | 4          | 15      |

241

|         |      |      |            |
|---------|------|------|------------|
| 敬       | 發    | 其    | 充          |
| jinq    | fa   | chyi | chong      |
| krjengs | pjal | sj   | tho/ung(?) |
| 22      | 6    | 34   | 24         |

242

|      |       |      |     |
|------|-------|------|-----|
| 是    | 謂     | 內    | 得   |
| shyh | wey   | ney  | der |
| sj   | wj+ts | nups | t+k |
| 34   | 5     | 31   | 15  |

243

|      |     |     |       |
|------|-----|-----|-------|
| 然    | 而   | 不   | 反     |
| ran  | erl | buh | faan  |
| njan | sj  | sj  | pjan? |
| 3    | 34  | 34  | 3     |

244

|      |        |     |      |
|------|--------|-----|------|
| 此    | 生      | 之   | 忒    |
| tsyy | sheng  | iy  | teh  |
| sj   | srjeng | tj+ | hl+k |
| 35   | 22     | 10  | 15   |

245

|     |     |
|-----|-----|
| 凡   | 道   |
| fam | daw |
| sj  | lu? |
| 34  | 13  |

246

必

|     |      |     |       |
|-----|------|-----|-------|
| bih | 周    | 必   | 密     |
| sj  | jou  | bih | mih   |
| 34  | tjiw | sj  | mrjit |
|     | 13   | 34  | 4     |

247

|     |       |     |      |
|-----|-------|-----|------|
| 必   | 寬     | 必   | 舒    |
| bih | kuan  | bih | shu  |
| sj  | kWhan | sj  | hlja |
| 34  | 3     | 34  | 12   |

248

|     |      |     |     |
|-----|------|-----|-----|
| 必   | 堅    | 必   | 固   |
| bih | jian | bih | guh |
| sj  | kin  | sj  | kas |
| 34  | 1    | 34  | 12  |

249

|       |       |     |      |
|-------|-------|-----|------|
| 守     | 善     | 勿   | 舍    |
| shoou | shann | wuh | sheh |
| sj    | sj    | sj  | sj   |
| 34    | 34    | 34  | 34   |

250

|     |    |      |      |
|-----|----|------|------|
| 逐   | 淫  | 澤    | 薄    |
| jwu | yn | tzer | bor  |
| !sj | sj | lrak | phak |
| 35  | 34 | 18   | 18   |

251

|     |      |      |         |
|-----|------|------|---------|
| 既   | 知    | 其    | 極       |
| jih | iy   | chyi | lyi     |
| sj  | trje | sj   | g(r)j+k |
| 34  | 11   | 34   | 15      |

252

|       |    |     |     |
|-------|----|-----|-----|
| 反     | 於  | 道   | 德   |
| faan  | yu | daw | der |
| pjan? | sj | lu? | t+k |
| 3     | 34 | 13  | 15  |

253

全

|        |      |      |         |
|--------|------|------|---------|
| chyuan | 心    | 在    | 中       |
| !sj    | shin | tzay | jong    |
| 35     | sj+m | dz+? | k-ljung |
|        | 29   | 10   | 21      |

254

|     |       |     |     |
|-----|-------|-----|-----|
| 不   | 可     | 蔽   | 匿   |
| buh | kee   | bih | nih |
| sj  | khaj? | sj  | !sj |
| 34  | 9     | 34  | 35  |

255

|     |    |       |         |
|-----|----|-------|---------|
| 和   | 於  | 形     | 容       |
| her | yu | shyng | rong    |
| sj  | sj | geng  | (l)jong |
| 34  | 34 | 22    | 24      |

256

|       |    |      |       |
|-------|----|------|-------|
| 見     | 於  | 膚    | 色     |
| jiann | yu | fu   | seh   |
| kens  | sj | prja | srj+k |
| 3     | 34 | 12   | 15    |

257

|       |      |     |      |
|-------|------|-----|------|
| 善     | 氣    | 迎   | 人    |
| shann | chih | yng | ren  |
| sj    | !sj  | sj  | njin |
| 34    | 35   | 34  | 1    |

258

|        |    |        |         |
|--------|----|--------|---------|
| 親      | 於  | 弟      | 兄       |
| chin   | yu | dih    | shiong  |
| tshjin | sj | d+/ij? | twrjang |
| 1      | 34 | 8      | 23      |

259

|      |      |     |      |
|------|------|-----|------|
| 惡    | 氣    | 迎   | 人    |
| wuh  | chih | yng | ren  |
| ?aks | !sj  | sj  | njin |
| 18   | 35   | 34  | 1    |

260

害

|         |    |       |        |
|---------|----|-------|--------|
| hay     | 於  | 戎     | 兵      |
| Hkat(s) | yu | rong  | bing   |
| 6       | sj | njung | prjang |
|         | 34 | 21    | 23     |

261

|     |       |     |       |
|-----|-------|-----|-------|
| 不   | 言     | 之   | 聲     |
| buh | yan   | iy  | sheng |
| sj  | ngyan | lj+ | xjeng |
| 34  | 3     | 10  | 22    |

262

|    |    |       |     |
|----|----|-------|-----|
| 疾  | 於  | 雷     | 鼓   |
| ji | yu | lei   | guu |
| sj | sj | C-ruj | ka? |
| 34 | 34 | 8     | 12  |

263

|      |      |     |       |
|------|------|-----|-------|
| 心    | 氣    | 之   | 形     |
| shin | chih | iy  | shyng |
| sj+m | !sj  | lj+ | geng  |
| 29   | 35   | 10  | 22    |

264

|        |    |      |        |
|--------|----|------|--------|
| 明      | 於  | 日    | 月      |
| ming   | yu | ryh  | yueh   |
| mrjang | sj | njit | ngWjat |
| 23     | 34 | 4    | 6      |

265

|      |    |         |          |
|------|----|---------|----------|
| 察    | 於  | 父       | 母        |
| char | yu | fuh     | muu      |
| ?    | sj | b(r)ja? | m(r)oi+? |
| 33   | 34 | 12      | 10       |

266

|        |     |       |      |         |       |
|--------|-----|-------|------|---------|-------|
| 賞      | 不   | 足     | 以    | 勸       | 善     |
| shaang | buh | tzwu  | yii  | chiuann | shann |
| !sj    | sj  | tsjok | lj+? | !sj     | sj    |
| 35     | 34  | 19    | 10   | 35      | 34    |

267

刑

|       |     |       |      |       |      |
|-------|-----|-------|------|-------|------|
| shyng | 不   | 足     | 以    | 懲     | 過    |
| geng  | buh | tzwu  | yii  | chemg | guoh |
| 22    | sj  | tsjok | lj+? | dr+ng | sj   |
|       | 34  | 19    | 10   | 20    | 34   |

268

|      |          |     |
|------|----------|-----|
| 氣    | 意        | 得   |
| chih | yih      | der |
| !sj  | ?(r)j+ks | t+k |
| 35   | 15       | 15  |

269

|     |      |       |      |
|-----|------|-------|------|
| 而   | 天    | 下     | 服    |
| erl | tian | shiah | fwu  |
| sj  | hlin | gra?  | bj+k |
| 34  | 1    | 12    | 15   |

270

|      |          |       |
|------|----------|-------|
| 心    | 意        | 定     |
| shin | yih      | dinq  |
| sj+m | ?(r)j+ks | dengs |
| 29   | 15       | 22    |

271

|     |      |       |       |
|-----|------|-------|-------|
| 而   | 天    | 下     | 聽     |
| erl | tian | shiah | ting  |
| sj  | hlin | gra?  | hleng |
| 34  | 1    | 12    | 22    |

272

|     |      |    |       |
|-----|------|----|-------|
| 搏   | 氣    | 如  | 神     |
| bor | chih | ru | shern |
| sj  | !sj  | sj | Ljin  |
| 34  | 35   | 34 | 1     |

273

|      |     |        |       |
|------|-----|--------|-------|
| 萬    | 物   | 備      | 存     |
| wann | wuh | bey    | tswen |
| sj   | sj  | brj+ks | dz+n  |
| 34   | 34  | 15     | 2     |

274

|        |     |    |
|--------|-----|----|
| 能      | 搏   | 乎  |
| neng   | bor | hu |
| n+(ng) | sj  | ha |
| 20     | 34  | 12 |
| 275    |     |    |

|        |      |    |
|--------|------|----|
| 能      | 一    | 乎  |
| neng   | i    | hu |
| n+(ng) | ?jit | ha |
| 20     | 4    | 12 |

|        |    |     |      |
|--------|----|-----|------|
| 能      | 無  | 卜   | 筮    |
| neng   | wu | buu | shyh |
| n+(ng) | sj | pok | sj   |
| 20     | 34 | 19  | 34   |

|     |      |      |          |    |
|-----|------|------|----------|----|
| 而   | 知    | 吉    | 凶        | 乎  |
| erl | ly   | jih  | shiong   | hu |
| sj  | trje | kJit | x(r)jong | ha |
| 34  | 11   | 4    | 24       | 12 |

|        |      |    |
|--------|------|----|
| 能      | 止    | 乎  |
| neng   | jyy  | hu |
| n+(ng) | tj+? | ha |
| 20     | 10   | 12 |

|        |      |    |
|--------|------|----|
| 能      | 已    | 乎  |
| neng   | yii  | hu |
| n+(ng) | lj+? | ha |
| 20     | 10   | 12 |

|        |     |       |    |      |
|--------|-----|-------|----|------|
| 能      | 勿   | 求     | 諸  | 人    |
| neng   | wuh | chyou | ju | ren  |
| n+(ng) | sj  | grju  | sj | njin |
| 20     | 34  | 13    | 34 | 1    |

281  
而

|     |     |     |    |    |
|-----|-----|-----|----|----|
| erl | 得   | 之   | 己  | 乎  |
| sj  | der | iy  | ji | hu |
| 34  | t+k | tj+ | sj | ha |
|     | 15  | 10  | 34 | 12 |

282

|     |     |     |     |
|-----|-----|-----|-----|
| 思   | 之   | 思   | 之   |
| sy  | iy  | sy  | iy  |
| sj+ | tj+ | sj+ | tj+ |
| 10  | 10  | 10  | 10  |

283

|         |         |     |     |
|---------|---------|-----|-----|
| 又       | 重       | 思   | 之   |
| yow     | chorng  | sy  | iy  |
| wj+(k)s | drijong | sj+ | tj+ |
| 15      | 24      | 10  | 10  |

284

|     |     |     |     |      |
|-----|-----|-----|-----|------|
| 思   | 之   | 而   | 不   | 通    |
| sy  | iy  | erl | buh | tong |
| sj+ | tj+ | sj  | sj  | !sj  |
| 10  | 10  | 34  | 34  | 35   |

285

|      |       |        |      |     |
|------|-------|--------|------|-----|
| 鬼    | 神     | 將      | 通    | 之   |
| goei | shern | jiang  | tong | iy  |
| sj   | Ljin  | tsjang | !sj  | tj+ |
| 34   | 1     | 23     | 35   | 10  |

286

|     |      |       |     |        |     |
|-----|------|-------|-----|--------|-----|
| 非   | 鬼    | 神     | 之   | 力      | 也   |
| fei | goei | shern | iy  | lih    | yee |
| sj  | sj   | Ljin  | tj+ | C-rj+k | sj  |
| 34  | 34   | 1     | 10  | 15     | 34  |

287

|      |      |     |         |     |
|------|------|-----|---------|-----|
| 精    | 氣    | 之   | 極       | 也   |
| jing | chih | iy  | ji      | yee |
| !sj  | !sj  | tj+ | g(r)j+k | sj  |
| 35   | 35   | 10  | 15      | 34  |

288

四

|            |       |     |        |
|------------|-------|-----|--------|
| syh        | 體     | 既   | 正      |
| s(p)jij/ts | tii   | jih | jenq   |
| 4          | hrij? | sj  | tjengs |
|            | 7     | 34  | 22     |

289

|        |      |     |      |
|--------|------|-----|------|
| 血      | 氣    | 既   | 靜    |
| shiuéh | chih | jih | jinq |
| hwil   | !sj  | sj  | sj   |
| 4      | 35   | 34  | 34   |

290

|      |          |     |      |
|------|----------|-----|------|
| 一    | 意        | 搏   | 心    |
| i    | yih      | bor | shin |
| ?jit | ?(r)j+ks | sj  | sj+m |
| 4    | 15       | 34  | 29   |

291

|      |     |     |    |
|------|-----|-----|----|
| 耳    | 目   | 不   | 淫  |
| eel  | muh | buh | yn |
| nj+? | sj  | sj  | sj |
| 10   | 34  | 34  | 34 |

292

|      |       |      |       |
|------|-------|------|-------|
| 雖    | 遠     | 若    | 近     |
| suei | yeuan | ruoh | jinn  |
| sj   | wjan? | njak | gj+n? |
| 34   | 3     | 18   | 2     |

293

|     |      |        |      |
|-----|------|--------|------|
| 思   | 索    | 生      | 知    |
| sy  | suoo | sheng  | jy   |
| sj+ | sj   | srjeng | trje |
| 10  | 34   | 22     | 11   |

294

|       |         |        |        |
|-------|---------|--------|--------|
| 慢     | 易       | 生      | 憂      |
| mann  | yih     | sheng  | iou    |
| mrans | ljek[s] | srjeng | ?(r)ju |
| 3     | 17      | 22     | 13     |

295

暴

|       |     |        |       |
|-------|-----|--------|-------|
| baw   | 傲   | 生      | 怨     |
| bawks |     |        |       |
| 28    | aw  | sheng  | yuann |
|       | !sj | srjeng | ?jons |
|       | 35  | 22     | 3     |

296

|        |     |        |    |
|--------|-----|--------|----|
| 憂      | 憂   | 生      | 疾  |
| iou    | yuh | sheng  | ji |
| ?(r)ju | sj  | srjeng | sj |
| 13     | 34  | 22     | 34 |

297

|    |       |     |      |
|----|-------|-----|------|
| 疾  | 困     | 乃   | 死    |
| ji | kuenn | nae | syy  |
| sj | !sj   | sj  | sji? |
| 34 | 35    | 34  | 7    |

298

|     |     |     |     |          |
|-----|-----|-----|-----|----------|
| 思   | 之   | 而   | 不   | 捨        |
| sy  | iy  | erl | buh | shee     |
| sj+ | tj+ | sj  | sj  | hjiA(k)? |
| 10  | 10  | 34  | 34  | 12       |

299

|      |       |        |      |
|------|-------|--------|------|
| 内    | 困     | 外      | 薄    |
| ney  | kuenn | way    | bor  |
| nups | !sj   | ngWats | phak |
| 31   | 35    | 6      | 18   |

300

|     |      |        |      |
|-----|------|--------|------|
| 不   | 蚤    | 爲      | 圖    |
| buh | tzao | wei    | twu  |
| sj  | tsu? | w(r)aj | d/la |
| 34  | 13   | 9      | 12   |

301

|        |        |        |      |
|--------|--------|--------|------|
| 生      | 將      | 巽      | 舍    |
| sheng  | jiang  | shiunn | sheh |
| srjeng | !sjang | !sj    | sj   |
| 22     | 23     | 35     | 34   |

302

食

|          |        |      |          |      |
|----------|--------|------|----------|------|
| shyr     | 莫      | 若    | 無        | 飽    |
| Lj+k     |        |      |          |      |
| 15       | moh    | ruoh | wu       | bao  |
|          | mak    | njak | sj       | pru? |
|          | 18     | 18   | 34       | 13   |
| 303      |        |      |          |      |
| 思        | 莫      | 若    | 勿        | 致    |
| sy       |        |      |          |      |
| sj+      | moh    | ruoh | wuh      | iyh  |
| 10       | mak    | njak | sj       | sj   |
|          | 18     | 18   | 34       | 34   |
| 304      |        |      |          |      |
| 節        | 適      | 之    | 齊        |      |
| jye      |        |      |          |      |
| tsik     | shyh   | iy   | chyi     |      |
| 4        | stjek  | tj+  | Hts(h)+j |      |
|          | 17     | 10   | 8        |      |
| 305      |        |      |          |      |
| 彼        | 將      | 自    | 至        |      |
| bii      |        |      |          |      |
| sj       | jiang  | tzyh | iyh      |      |
| 34       | tsjang | sj   | tjits    |      |
|          | 23     | 34   | 4        |      |
| 306      |        |      |          |      |
| 凡        | 人      | 之    | 生        | 也    |
| farn     |        |      |          |      |
| sj       | ren    | iy   | sheng    | yee  |
| 34       | njin   | tj+  | srjeng   | sj   |
|          | 1      | 10   | 22       | 34   |
| 307      |        |      |          |      |
| 天        | 出      | 其    | 精        |      |
| tian     |        |      |          |      |
| hlin     | chu    | chyi | jing     |      |
| 1        | thjut  | sj   | lsj      |      |
|          | 5      | 34   | 35       |      |
| 308      |        |      |          |      |
| 地        | 出      | 其    | 形        |      |
| dih      |        |      |          |      |
| lrjajs ? | chu    | chyi | shyng    |      |
| 9        | thjut  | sj   | geng     |      |
|          | 5      | 34   | 22       |      |
| 309      |        |      |          |      |
| 合        |        |      |          |      |

|     |       |      |         |
|-----|-------|------|---------|
| her | 此     | 以    | 爲       |
| gop | tsyy. | yii  | wei     |
| 32  | sj    | lj+7 | w(r)jaj |
|     | 35    | 10   | 9       |

310

人

|      |     |     |        |
|------|-----|-----|--------|
| ren  | 和   | 乃   | 生      |
| njin | her | nae | sheng  |
| 1    | sj  | sj  | srjeng |
|      | 34  | 34  | 22     |

311

不

|     |     |     |        |
|-----|-----|-----|--------|
| buh | 和   | 不   | 生      |
| sj  | her | buh | sheng  |
| 34  | sj  | sj  | srjeng |
|     | 34  | 34  | 22     |

312

察

|      |     |     |     |
|------|-----|-----|-----|
| char | 和   | 之   | 道   |
| ?    | her | iy  | daw |
| 33   | sj  | lj+ | lu? |
|      | 34  | 10  | 13  |

313

其

|      |      |     |       |
|------|------|-----|-------|
| chyi | 精    | 不   | 見     |
| sj   | jing | buh | jiann |
| 34   | !sj  | sj  | kens  |
|      | 35   | 34  | 3     |

314

其

|      |      |     |       |
|------|------|-----|-------|
| chyi | 微    | 不   | 醜     |
| sj   | jeng | buh | choou |
| 34   | !sj  | sj  | thju? |
|      | 35   | 34  | 13    |

315

平

|        |        |       |        |
|--------|--------|-------|--------|
| pyng   | 正      | 擅     | 匈      |
| brjeng | jenq   | shann | shiong |
| 22     | tjengs | !sj   | !sj    |
|        | 22     | 35    | 35     |

316

論

|       |      |      |      |
|-------|------|------|------|
| luenn | 治    | 在    | 心    |
| sj    | jyh  | tzay | shin |
| 34    | lrj+ | dz+? | sj+m |
|       | 10   | 10   | 29   |

317

|      |      |         |      |
|------|------|---------|------|
| 此    | 以    | 長       | 壽    |
| tsyy | yii  | chamg   | show |
| sj   | lj+? | Htrjang | dju? |
| 35   | 10   | 23      | 13   |

318

|      |           |     |     |      |
|------|-----------|-----|-----|------|
| 忿    | 怒         | 之   | 失   | 度    |
| fenn | nuh       | iy  | shy | duh  |
| lsj  | nas V na? | lj+ | sj  | laks |
| 35   | 12        | 10  | 34  | 18   |

319

|     |        |     |      |
|-----|--------|-----|------|
| 乃   | 爲      | 之   | 圖    |
| nae | wei    | iy  | twu  |
| sj  | w(r)aj | lj+ | d/la |
| 34  | 9      | 10  | 12   |

320

|      |      |      |     |
|------|------|------|-----|
| 節    | 其    | 五    | 欲   |
| jye  | chyi | wuu  | yuh |
| tsik | sj   | nga? | sj  |
| 4    | 34   | 12   | 34  |

321

|          |      |     |          |
|----------|------|-----|----------|
| 去        | 其    | 二   | 𠂔        |
| chiuh    | chyi | ell | shiong   |
| kh(r)jas | sj   | sj  | x(r)jong |
| 12       | 34   | 34  | 24       |

322

|     |         |     |           |
|-----|---------|-----|-----------|
| 不   | 喜       | 不   | 怒         |
| buh | shii    | buh | nuh       |
| sj  | x(r)j+? | sj  | nas V na? |
| 34  | 10      | 34  | 12        |

323

平

|        |        |       |        |
|--------|--------|-------|--------|
| pyng   | 正      | 擅     | 凶      |
| brjeng | jenq   | shann | shiong |
| 22     | tjengs | !sj   | !sj    |
|        | 22     | 35    | 35     |

324

|     |      |     |        |     |
|-----|------|-----|--------|-----|
| 凡   | 人    | 之   | 生      | 也   |
| fam | ren  | jy  | sheng  | yee |
| sj  | njin | tj+ | srjeng | sj  |
| 34  | 1    | 10  | 22     | 34  |

325

|     |      |        |        |
|-----|------|--------|--------|
| 必   | 以    | 平      | 正      |
| bih | yii  | pyng   | jenq   |
| sj  | lj+? | brjeng | tjengs |
| 34  | 10   | 22     | 22     |

326

|          |      |     |     |
|----------|------|-----|-----|
| 所        | 以    | 失   | 之   |
| suoo     | yii  | shy | jy  |
| s(k)rja? | lj+? | sj  | tj+ |
| 12       | 10   | 34  | 10  |

327

|     |      |         |           |        |       |
|-----|------|---------|-----------|--------|-------|
| 必   | 以    | 喜       | 怒         | 憂      | 患     |
| bih | yii  | shii    | nuh       | iou    | huann |
| sj  | lj+? | x(r)j+? | nas V na? | ?(r)ju | sj    |
| 34  | 10   | 10      | 12        | 13     | 34    |

328

|      |        |
|------|--------|
| 是    | 故      |
| shyh | guh    |
| sj   | ka?(s) |
| 34   | 12     |

329

|      |           |     |      |      |
|------|-----------|-----|------|------|
| 止    | 怒         | 莫   | 若    | 詩    |
| jiy  | nuh       | moh | ruoh | shy  |
| lj+? | nas V na? | mak | njak | stj+ |
| 10   | 12        | 18  | 18   | 10   |

330

去

|          |         |        |         |         |
|----------|---------|--------|---------|---------|
| chiuh    | 憂       | 莫      | 若       | 樂       |
| kh(r)jas |         |        |         |         |
| 12       | iou     | moh    | ruoh    | yueh    |
|          | ?(r)ju  | mak    | njak    | sj      |
|          | 13      | 18     | 18      | 34      |
| 331      |         |        |         |         |
| 節        | 樂       | 莫      | 若       | 禮       |
| jye      | leh     | moh    | ruoh    | lii     |
| tsik     | g-rawk  | mak    | njak    | C-rij?  |
| 4        | 28      | 18     | 18      | 7       |
| 332      |         |        |         |         |
| 守        | 禮       | 莫      | 若       | 敬       |
| shoou    | lii     | moh    | ruoh    | jinq    |
| sj       | C-rij?  | mak    | njak    | krjengs |
| 34       | 7       | 18     | 18      | 22      |
| 333      |         |        |         |         |
| 守        | 敬       | 莫      | 若       | 靜       |
| shoou    | jinq    | moh    | ruoh    | jinq    |
| sj       | krjengs | mak    | njak    | sj      |
| 34       | 22      | 18     | 18      | 34      |
| 334      |         |        |         |         |
| 內        | 靜       | 外      | 敬       |         |
| ney      | jinq    | way    | jinq    |         |
| nups     | sj      | ngWats | krjengs |         |
| 31       | 34      | 6      | 22      |         |
| 335      |         |        |         |         |
| 能        | 反       | 其      | 性       |         |
| neng     | faan    | chyi   | shinq   |         |
| n+(ng)   | pjan?   | sj     | sj      |         |
| 20       | 3       | 34     | 34      |         |
| 336      |         |        |         |         |
| 性        | 將       | 大      | 定       |         |
| shinq    | jiang   | dah    | dinq    |         |
| sj       | tsjang  | lats   | dengs   |         |
| 34       | 23      | 6      | 22      |         |
| 337      |         |        |         |         |
| 凡        |         |        |         |         |

|     |      |     |     |
|-----|------|-----|-----|
| fam | 食    | 之   | 道   |
| sj  |      |     |     |
| 34  | shyr | iy  | daw |
|     | Lj+k | tj+ | lu? |
|     | 15   | 10  | 13  |

338

|      |            |
|------|------------|
| 大    | 充          |
| dah  | chong      |
| lats | tho/ung(?) |
| 6    | 24         |

339

|       |     |       |     |       |
|-------|-----|-------|-----|-------|
| 傷     | 而   | 形     | 不   | 臧     |
| shang | erl | shyng | buh | tsang |
| hjang | sj  | geng  | sj  | sj    |
| 23    | 34  | 22    | 34  | 34    |

340

|      |      |
|------|------|
| 大    | 撮    |
| dah  | sheh |
| lats | sj   |
| 6    | 34   |

341

|     |     |     |       |     |
|-----|-----|-----|-------|-----|
| 骨   | 枯   | 而   | 血     | 互   |
| guu | ku  | erl | shueh | huh |
| !sj | !sj | sj  | hwit  | !sj |
| 35  | 35  | 34  | 4     | 35  |

342

|            |      |     |      |
|------------|------|-----|------|
| 充          | 撮    | 之   | 閒    |
| chong      | sheh | iy  | jian |
| tho/ung(?) | sj   | tj+ | kren |
| 24         | 34   | 10  | 3    |

343

|      |       |     |        |
|------|-------|-----|--------|
| 此    | 謂     | 和   | 成      |
| tsyy | wey   | her | cherng |
| sj   | wj+!s | sj  | djeng  |
| 35   | 5     | 34  | 22     |

344

精

|       |         |          |          |        |
|-------|---------|----------|----------|--------|
| jing  | 之       | 所        | 舍        |        |
| !sj   |         |          |          |        |
| 35    | iy      | suoo     | sheh     |        |
|       | tj+     | s(k)rja? | sj       |        |
|       | 10      | 12       | 34       |        |
| 345   |         |          |          |        |
| 而     | 知       | 之        | 所        | 生      |
| erl   |         |          |          |        |
| sj    | iy      | iy       | suoo     | sheng  |
| 34    | trje    | tj+      | s(k)rja? | srjeng |
|       | 11      | 10       | 12       | 22     |
| 346   |         |          |          |        |
| 飢     | 飽       | 之        | 失        | 度      |
| ji    |         |          |          |        |
| krj+j | bao     | iy       | shy      | duh    |
| 8     | pru?    | tj+      | sj       | laks   |
|       | 13      | 10       | 34       | 18     |
| 347   |         |          |          |        |
| 乃     | 爲       | 之        | 圖        |        |
| nae   |         |          |          |        |
| sj    | wei     | iy       | twu      |        |
| 34    | w(r)jaj | tj+      | d/la     |        |
|       | 9       | 10       | 12       |        |
| 348   |         |          |          |        |
| 飽     | 則       | 疾        | 動        |        |
| bao   |         |          |          |        |
| pru?  | tzer    | ji       | donq     |        |
| 13    | ts+k    | sj       | dong?    |        |
|       | 15      | 34       | 24       |        |
| 349   |         |          |          |        |
| 飢     | 則       | 廣        | 思        |        |
| ji    |         |          |          |        |
| krj+j | tzer    | kuang    | sy       |        |
| 8     | ts+k    | !sj      | sj+      |        |
|       | 15      | 35       | 10       |        |
| 350   |         |          |          |        |
| 老     | 則       | 長        | 慮        |        |
| lao   |         |          |          |        |
| C-ru? | tzer    | chang    | liuh     |        |
| 13    | ts+k    | Htrjang  | sj       |        |
|       | 15      | 23       | 34       |        |
| 351   |         |          |          |        |
| 飽     |         |          |          |        |

|      |     |    |       |
|------|-----|----|-------|
|      | 不   | 疾  | 動     |
| bao  |     |    |       |
| pru? | buh | ji | donq  |
| 13   | sj  | sj | dong? |
|      | 34  | 34 | 24    |

352

|      |     |      |    |            |     |   |
|------|-----|------|----|------------|-----|---|
|      | 氣   | 不    | 通  | 於          | 四   | 末 |
| chih |     |      |    |            |     |   |
| !sj  | buh | tong | yu | syh        | moh |   |
| 35   | sj  | !sj  | sj | s(p)jij/ts | !sj |   |
|      | 34  | 35   | 34 | 4          | 35  |   |

353

|       |     |       |     |   |
|-------|-----|-------|-----|---|
|       | 飢   | 不     | 廣   | 思 |
| ji    |     |       |     |   |
| krj+j | buh | kuang | sy  |   |
| 8     | sj  | !sj   | sj+ |   |
|       | 34  | 35    | 10  |   |

354

|      |     |     |     |   |
|------|-----|-----|-----|---|
|      | 飽   | 而   | 不   | 廢 |
| bao  |     |     |     |   |
| pru? | erl | buh | fey |   |
| 13   | sj  | sj  | sj  |   |
|      | 34  | 34  | 34  |   |

355

|       |     |         |      |   |
|-------|-----|---------|------|---|
|       | 老   | 不       | 長    | 慮 |
| lao   |     |         |      |   |
| C-ru? | buh | chang   | liuh |   |
| 13    | sj  | Htrjang | sj   |   |
|       | 34  | 23      | 34   |   |

356

|       |     |     |      |   |
|-------|-----|-----|------|---|
|       | 困   | 乃   | 邀    | 竭 |
| kuenn |     |     |      |   |
| !sj   | nae | suh | jye  |   |
| 35    | sj  | !sj | gjat |   |
|       | 34  | 35  | 6    |   |

357

|      |      |     |      |   |
|------|------|-----|------|---|
|      | 大    | 心   | 而    | 敢 |
| dah  |      |     |      |   |
| lats | shin | erl | gaan |   |
| 6    | sj+m | sj  | kam? |   |
|      | 29   | 34  | 30   |   |

358

寬

|       |      |     |       |
|-------|------|-----|-------|
| kuan  | 氣    | 而   | 廣     |
| kWhan | chih | erl | kuanq |
| 3     | !sj  | sj  | !sj   |
|       | 35   | 34  | 35    |

359

|      |       |     |   |
|------|-------|-----|---|
|      | 其     | 形   | 安 |
| chyi | shyng | an  |   |
| sj   | geng  | ?an |   |
| 34   | 22    | 3   |   |

360

|     |     |     |   |
|-----|-----|-----|---|
|     | 而   | 不   | 移 |
| erl | buh | yi  |   |
| sj  | sj  | !sj |   |
| 34  | 34  | 35  |   |

361

|        |       |      |   |
|--------|-------|------|---|
|        | 能     | 守    | 一 |
| neng   | shoou | i    |   |
| n+(ng) | sj    | ?jit |   |
| 20     | 34    | 4    |   |

362

|     |        |      |     |   |
|-----|--------|------|-----|---|
|     | 而      | 棄    | 萬   | 苛 |
| erl | chih   | wann | ke  |   |
| sj  | khjits | sj   | !sj |   |
| 34  | 4      | 34   | 35  |   |

363

|       |         |     |      |   |
|-------|---------|-----|------|---|
|       | 見       | 利   | 不    | 誘 |
| jiann | lih     | buh | yow  |   |
| kens  | C-rjits | sj  | lju? |   |
| 3     | 4       | 34  | 13   |   |

364

|       |         |     |      |   |
|-------|---------|-----|------|---|
|       | 見       | 害   | 不    | 懼 |
| jiann | hay     | buh | jiuh |   |
| kens  | Hkal(s) | sj  | sj   |   |
| 3     | 6       | 34  | 34   |   |

365

寬

|       |      |     |      |
|-------|------|-----|------|
| kuan  | 舒    | 而   | 仁    |
| kWhan | shu  | erl | ren  |
| 3     | hlja | sj  | njin |
|       | 12   | 34  | 1    |

366

|     |        |      |       |   |
|-----|--------|------|-------|---|
|     | 獨      | 樂    | 其     | 身 |
| dwu | leh    | chyi | shen  |   |
| dok | g-rawk | sj   | hljin |   |
| 19  | 28     | 34   | 1     |   |

367

|      |       |      |      |   |
|------|-------|------|------|---|
|      | 是     | 謂    | 雲    | 氣 |
| shyh | wey   | yun  | chih |   |
| sj   | wj+ts | wj+n | !sj  |   |
| 34   | 5     | 2    | 35   |   |

368

|          |        |       |      |   |
|----------|--------|-------|------|---|
|          | 意      | 行     | 似    | 天 |
| yih      | shyng  | syh   | tian |   |
| ?(r)j+ks | grangs | zlj+? | hlin |   |
| 15       | 23     | 10    | 1    |   |

369

|     |      |     |        |     |   |
|-----|------|-----|--------|-----|---|
|     | 凡    | 人   | 之      | 生   | 也 |
| fam | ren  | iy  | sheng  | yee |   |
| sj  | njin | tj+ | srjeng | sj  |   |
| 34  | 1    | 10  | 22     | 34  |   |

370

|     |      |      |      |   |
|-----|------|------|------|---|
|     | 必    | 以    | 其    | 歡 |
| bih | yii  | chyi | huan |   |
| sj  | lj+? | sj   | !sj  |   |
| 34  | 10   | 34   | 35   |   |

371

|        |      |     |         |   |
|--------|------|-----|---------|---|
|        | 憂    | 則   | 失       | 紀 |
| iou    | tzer | shy | jih     |   |
| ?(r)ju | ts+k | sj  | k(r)j+? |   |
| 13     | 15   | 34  | 10      |   |

372

怒 則 失 端

|           |      |     |      |
|-----------|------|-----|------|
| nuh       | tzer | shy | duan |
| nas V na? | ts+k | sj  | !sj  |
| 12        | 15   | 34  | 35   |

373

憂 悲 喜 怒

|        |       |         |           |
|--------|-------|---------|-----------|
| iou    | bei   | shii    | nuh       |
| ?(r)iu | prj+j | x(r)j+? | nas V na? |
| 13     | 8     | 10      | 12        |

374

道 乃 無 處

|     |     |    |       |
|-----|-----|----|-------|
| daw | nae | wu | chuu  |
| lu? | sj  | sj | KHja? |
| 13  | 34  | 34 | 12    |

375

愛 慾 靜 之

|       |     |      |     |
|-------|-----|------|-----|
| ay    | yuh | jinq | iy  |
| ?(+ts | !sj | sj   | tj+ |
| 5     | 35  | 34   | 10  |

376

遇 亂 正 之

|     |        |        |     |
|-----|--------|--------|-----|
| yuh | luann  | jenq   | iy  |
| sj  | C-rans | tjengs | tj+ |
| 34  | 3      | 22     | 10  |

377

勿 引 勿 推

|     |       |     |      |
|-----|-------|-----|------|
| wuh | yiin  | wuh | tuei |
| sj  | !jin? | sj  | thuj |
| 34  | 1     | 34  | 8    |

378

福 將 自 歸

|      |        |      |       |
|------|--------|------|-------|
| fwu  | jiang  | tzyh | guei  |
| pj+k | tsjang | sj   | KWj+j |
| 15   | 23     | 34   | 8     |

379

彼 道 自 來

|     |     |      |         |
|-----|-----|------|---------|
| bii | daw | tzyh | lai     |
| sj  | lu? | sj   | C-r+(k) |
| 34  | 13  | 34   | 10      |
| 380 |     |      |         |

可 藉 與 謀

|       |      |      |     |
|-------|------|------|-----|
| kee   | jieh | yeu  | mou |
| khaj? | sj   | lja? | mj+ |
| 9     | 34   | 12   | 10  |

381

靜 則 得 之

|      |      |     |     |
|------|------|-----|-----|
| jinq | tzer | der | iy  |
| sj   | ts+k | t+k | tj+ |
| 34   | 15   | 15  | 10  |

382

躁 則 失 之

|      |      |     |     |
|------|------|-----|-----|
| tzaw | tzer | shy | iy  |
| !sj  | ts+k | sj  | tj+ |
| 35   | 15   | 34  | 10  |

383

靈 氣 在 心

|        |      |      |      |
|--------|------|------|------|
| ling   | chih | tzay | shin |
| C-reng | !sj  | dz+? | sj+m |
| 22     | 35   | 10   | 29   |

384

一 來 一 逝

|      |         |      |      |
|------|---------|------|------|
| i    | lai     | l    | shyh |
| ?jit | C-r+(k) | ?jit | sj   |
| 4    | 10      | 4    | 34   |

385

其 細 無 內

|      |      |    |      |
|------|------|----|------|
| chyí | shih | wu | ney  |
| sj   | !sj  | sj | nups |
| 34   | 35   | 34 | 31   |

386

|      |      |    |        |
|------|------|----|--------|
| 其    | 大    | 無  | 外      |
| chyi | dah  | wu | way    |
| sj   | lats | sj | ngWats |
| 34   | 6    | 34 | 6      |

387

|          |      |     |     |
|----------|------|-----|-----|
| 所        | 以    | 失   | 之   |
| suoo     | yii  | shy | iy  |
| s(k)rja? | lj+? | sj  | tj+ |
| 12       | 10   | 34  | 10  |

388

|      |      |         |         |
|------|------|---------|---------|
| 以    | 躁    | 爲       | 害       |
| yii  | tzaw | wei     | hay     |
| lj+? | !sj  | w(r)jaj | Hkal(s) |
| 10   | 35   | 9       | 6       |

389

|      |        |     |      |
|------|--------|-----|------|
| 心    | 能      | 執   | 靜    |
| shin | neng   | iyr | jinq |
| sj+m | n+(ng) | sj  | sj   |
| 29   | 20     | 34  | 34   |

390

|     |        |      |       |
|-----|--------|------|-------|
| 道   | 將      | 自    | 定     |
| daw | jiang  | tzyh | dinq  |
| lu? | tsjang | sj   | dengs |
| 13  | 23     | 34   | 22    |

391

|     |     |     |      |
|-----|-----|-----|------|
| 得   | 道   | 之   | 人    |
| der | daw | iy  | ren  |
| t+k | lu? | tj+ | njin |
| 15  | 13  | 10  | 1    |

392

|        |        |     |      |       |
|--------|--------|-----|------|-------|
| 理      | 丞      | 而   | 屯    | 泄     |
| lii    | cherng | erl | juen | shieh |
| C-rj+? | !sj    | sj  | !sj  | sj    |
| 10     | 35     | 34  | 35   | 34    |

393

|   |
|---|
| 凶 |
|---|

|        |         |    |        |
|--------|---------|----|--------|
| shiong | 中       | 無  | 敗      |
| !sj    | jong    | wu | bay    |
| 35     | k-ljung | sj | hprats |
|        | 21      | 34 | 6      |

394

|      |     |     |     |
|------|-----|-----|-----|
| 節    | 欲   | 之   | 道   |
| jye  | yuh | iy  | daw |
| tsik | sj  | tj+ | lu? |
| 4    | 34  | 10  | 13  |

395

|      |     |     |         |
|------|-----|-----|---------|
| 萬    | 物   | 不   | 害       |
| wann | wuh | buh | hay     |
| sj   | sj  | sj  | Hkat(s) |
| 34   | 34  | 34  | 6       |

**Appendix E**

**SBTK NeyYeh: Scanned Reproduction**





他國... 正心在中萬物得度

道隨天下言在民所民不能知也

天下... 我必治官刀治我心安官乃安

心也... 彼心之心

心也... 音以先言

亂乃死... 言然後使

內藏以爲泉原... 泉之不竭

無邪... 心全於中

不違天... 能止解皮膚

明前信而骨... 方能戴大國

方... 視於大明

下... 是謂內得

生之... 必寬必舒

及道... 必堅必固

善勿合... 既知其極

全... 和於形容

色... 見於膚

疾... 心氣之形

於... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

天... 實不足以

必意定而天下聽必意定則神氣自聚搏氣如神萬物備存神氣自聚則萬物皆備

能搏乎能乎搏氣如神萬物備存能無下筮而知吉凶乎神氣自聚則萬物皆備

能止乎能已乎搏氣如神萬物備存能勿求諸人而之已乎神氣自聚則萬物皆備

非鬼神之力也精氣之極也神氣自聚則萬物皆備思之而不通是神將通之

四體既正血氣既靜一意搏心耳目不淫雖遠若近

思之而不捨內困外薄思之而不捨內困外薄慢易生憂

思之而不捨內困外薄思之而不捨內困外薄慢易生憂

思之而不捨內困外薄思之而不捨內困外薄慢易生憂

思之而不捨內困外薄思之而不捨內困外薄慢易生憂

思之而不捨內困外薄思之而不捨內困外薄慢易生憂

思之而不捨內困外薄思之而不捨內困外薄慢易生憂

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## The forms of chapter titles and divisions in the GoanTzyy

| Eight Categories | Jiuann | Pian # | Pian Title |                  |            |  |
|------------------|--------|--------|------------|------------------|------------|--|
| 經言               | 1      | 1      | 牧民         | Muh Min          |            |  |
|                  |        | 2      | 形勢         | Shyng Shyh       |            |  |
|                  |        | 3      | 權修         | Chyuan Shiou     |            |  |
|                  |        | 4      | 立政         | Lih Jenq         |            |  |
|                  |        | 5      | 乘馬         | Cherng Maa       |            |  |
|                  | 2      | 6      | 七法         | Chi Faa          |            |  |
|                  |        | 7      | 版法         | Baan Faa         |            |  |
|                  | 3      | 8      | 幼官         | Yow Guan         |            |  |
|                  |        | 9      | 幼官圖        | Yow Guan Twu     |            |  |
| 外言               | 4      | 10     | 五輔         | Wuu Fuu          |            |  |
|                  |        | 11     | 宙合言        | Jow Her          |            |  |
|                  |        | 12     | 樞言         | Shu Yan          |            |  |
|                  | 5      | 13     | 八觀         | Ba Guan          |            |  |
|                  |        | 14     | 法禁         | Faa Jinn         |            |  |
|                  |        | 15     | 重令法        | Jonq/Chornq Linq |            |  |
|                  | 6      | 16     | 法法         | Faa Faa          |            |  |
|                  |        | 17     | 兵法         | Bing Faa         |            |  |
|                  | 內言     | 7      | 18         | 大匡               | Dah Kuang  |  |
|                  |        | 8      | 19         | 中匡               | Jong Kuang |  |
| 20               |        |        | 小匡         | Sheau Kuang      |            |  |
| 21               |        |        | 王言         | Wang Yan         | lost       |  |
| 9                |        | 22     | 霸形         | Bah Shyng        |            |  |
|                  |        | 23     | 霸言         | Bah Yan          |            |  |
|                  |        | 24     | 問          | Wenn             |            |  |
|                  |        | 25     | 謀失         | Mou Shy          | lost       |  |
| 短語               |        | 10     | 26         | 戒                | Jieh       |  |
|                  |        |        | 27         | 地圖               | Dih Twu    |  |
|                  | 28     |        | 參患         | Tsan Huann       |            |  |
|                  | 29     |        | 制分         | Jyh Fen          |            |  |
|                  | 30     |        | 君臣上        | Jiun Chern Shang |            |  |
|                  | 11     | 31     | 君臣下        | Jiun Chern Shiah |            |  |
|                  |        | 32     | 小稱         | Sheau Cheng      |            |  |
|                  |        | 33     | 四稱         | Syh Cheng        |            |  |
|                  |        | 34     | 正言         | Jenq Yan         | lost       |  |
|                  | 12     | 35     | 侈靡         | Chyy Mii         |            |  |
|                  | 13     | 36     | 心術上        | Shin Shuh Shang  |            |  |
|                  |        | 37     | 心術下        | Shin Shuh Shiah  |            |  |
|                  |        | 38     | 白心         | Bair Shin        |            |  |
|                  | 14     | 39     | 水地         | Shoei Dih        |            |  |
|                  |        | 40     | 四時         | Syh Shyr         |            |  |
| 41               |        | 五行     | Wuu Shyng  |                  |            |  |
| 15               | 42     | 勢      | Shyh       |                  |            |  |
|                  | 43     | 正      | Jenq       |                  |            |  |
|                  | 44     | 九變     | Jeou Biann |                  |            |  |
|                  | 45     | 任法     | Renn Faa   |                  |            |  |
| 區言               |        | 46     | 明法         | Ming Faa         |            |  |
|                  |        | 47     | 正世         | Jenq Shyh        |            |  |
|                  |        | 48     | 治國         | Jyh Gwo          |            |  |

|     |    |     |                  |                        |          |
|-----|----|-----|------------------|------------------------|----------|
| 雜篇  | 16 | 49  | 內業               | Ney Yeh                |          |
|     |    | 50  | 封禪               | Feng Shann             | replaced |
|     |    | 51  | 小問               | Sheau Wenn             |          |
|     | 17 | 52  | 七臣七主             | Chi Chern Chi Juu      |          |
|     |    | 53  | 禁藏               | Jinn Tsarng            |          |
|     | 18 | 54  | 入國               | Ruh Gwo                |          |
|     |    | 55  | 九守               | Jeou Shoou             |          |
|     |    | 56  | 桓公問              | Hwan Gong Wenn         |          |
|     |    | 57  | 度地               | Duh Dih                |          |
|     | 19 | 58  | 地員               | Dih Yuan               |          |
|     |    | 59  | 弟子職              | Dih Tzyy Jyr           |          |
|     |    | 60  | 言昭               | Yan Jau                | lost     |
| 61  |    | 修身  | Shiou Shen       | lost                   |          |
| 62  |    | 問霸  | Wenn Bah         | lost                   |          |
| 管子解 | 20 | 63  | 牧民解              | Muh Min Jiee           | lost     |
|     |    | 64  | 形勢解              | Shyng Shyh Jiee        |          |
|     |    | 65  | 立政九敗解            | Lih Jenq Jeou Bay Jiee |          |
|     | 21 | 66  | 版法解              | Baan Faa Jiee          |          |
|     |    | 67  | 明法解              | Ming Faa Jiee          |          |
| 輕重  | 22 | 68  | 臣乘馬              | Chern Sheng Maa        |          |
|     |    | 69  | 乘馬數              | Sheng Maa Shuh         |          |
|     |    | 70  | 問乘馬              | Wenn Sheng Maa         | lost     |
|     |    | 71  | 事語               | Shyh Yeu               |          |
|     | 23 | 72  | 海王               | Hae Wang               |          |
|     |    | 73  | 國蓄               | Gwo Shiuh              |          |
|     |    | 74  | 山國軌              | Shan Gwo Yuch          |          |
|     |    | 75  | 山權數              | Shan Chyuan Shuh       |          |
|     |    | 76  | 山至數              | Shan Jyh Shuh          |          |
|     |    | 77  | 地數               | Dih Shuh               |          |
|     | 24 | 78  | 揆度               | Kwei Duh               |          |
|     |    | 79  | 國準               | Gwo Joen               |          |
|     |    | 80  | 輕重甲              | Ching Jong Jea         |          |
|     |    | 81  | 輕重乙              | Ching Jong Yii         |          |
| 82  |    | 輕重丙 | Ching Jong Biing | lost                   |          |
| 83  |    | 輕重丁 | Ching Jong Ding  |                        |          |
| 84  |    | 輕重戊 | Ching Jong Wuh   |                        |          |
| 85  |    | 輕重己 | Ching Jong Jii   |                        |          |
| 86  |    | 輕重庚 | Ching Jong Geng  | lost                   |          |

**Appendix G****RIA Similarity Matrices & Isolexes**

## RIA data SBTK Ver. NeyYeh - 8 segments @ 196 char.

1

|   | a  | b  | c  | d  | e  | f  | g  | h  |
|---|----|----|----|----|----|----|----|----|
| a |    | 83 | 72 | 77 | 67 | 75 | 78 | 71 |
| b | 83 |    | 78 | 76 | 62 | 70 | 70 | 78 |
| c | 72 | 78 |    | 87 | 77 | 82 | 67 | 74 |
| d | 77 | 76 | 87 |    | 70 | 72 | 72 | 75 |
| e | 67 | 62 | 77 | 70 |    | 70 | 66 | 66 |
| f | 75 | 70 | 82 | 72 | 70 |    | 61 | 72 |
| g | 78 | 70 | 67 | 72 | 66 | 61 |    | 84 |
| h | 71 | 78 | 74 | 75 | 66 | 72 | 84 |    |

|     |    |    |    |    |    |    |    |    |
|-----|----|----|----|----|----|----|----|----|
| ave | 75 | 74 | 77 | 76 | 68 | 71 | 71 | 74 |
| med | 75 | 76 | 77 | 75 | 67 | 72 | 70 | 74 |

|            |   |   |    |
|------------|---|---|----|
| base pairs | a | b | 83 |
|            | c | d | 87 |
|            | g | h | 84 |

2

|    | ab | cd | e  | f  | gh |
|----|----|----|----|----|----|
| ab | -1 | 94 | 73 | 76 | 93 |
| cd | 94 | -1 | 78 | 82 | 84 |
| e  | 73 | 78 | -1 | 70 | 72 |
| f  | 76 | 82 | 70 | -1 | 71 |
| gh | 93 | 84 | 72 | 71 | -1 |

|     |    |    |    |    |    |
|-----|----|----|----|----|----|
| ave | 84 | 84 | 73 | 75 | 80 |
| med | 85 | 83 | 73 | 74 | 78 |

|            |    |    |    |
|------------|----|----|----|
| base pairs | ab | cd | 94 |
|------------|----|----|----|

3

|      | abcd | e  | f  | gh |
|------|------|----|----|----|
| abcd | -1   | 82 | 84 | 97 |
| e    | 82   | -1 | 70 | 72 |
| f    | 84   | 70 | -1 | 71 |
| gh   | 97   | 72 | 71 | -1 |

|     |    |    |    |    |
|-----|----|----|----|----|
| ave | 88 | 75 | 75 | 80 |
| med | 84 | 72 | 71 | 72 |

|            |      |    |    |
|------------|------|----|----|
| base pairs | abcd | gh | 97 |
|------------|------|----|----|

4

|        | abcdgh | e  | f  |
|--------|--------|----|----|
| abcdgh | -1     | 82 | 84 |
| e      | 82     | -1 | 70 |
| f      | 84     | 70 | -1 |

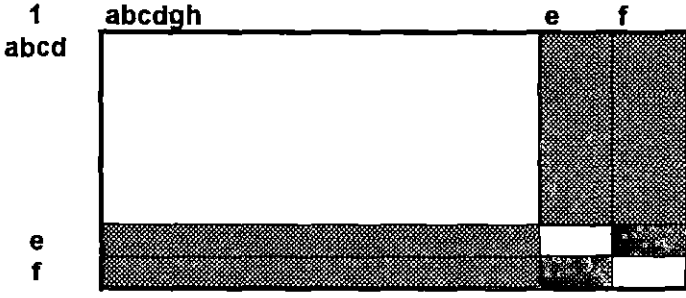
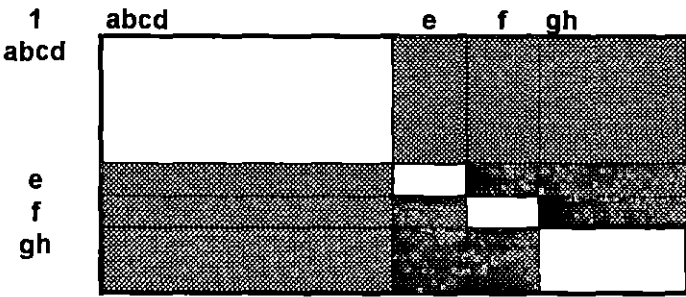
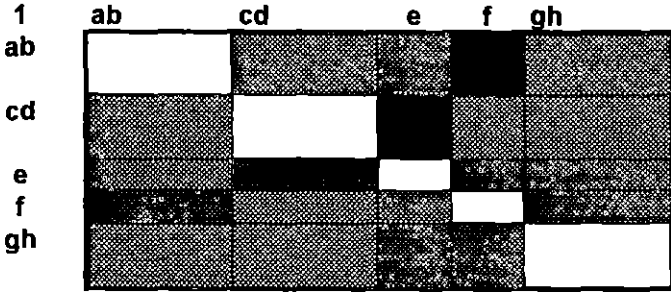
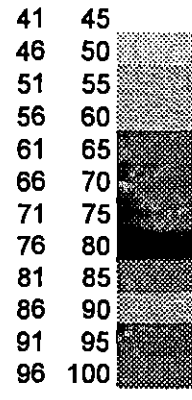
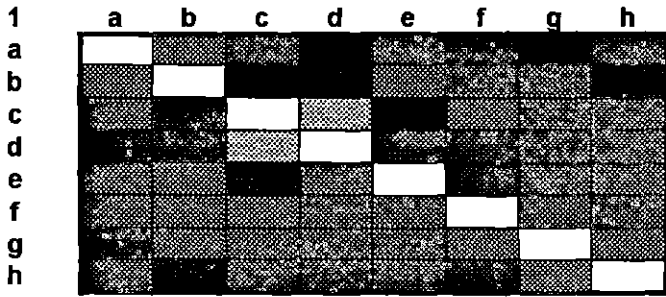
|     |    |    |    |
|-----|----|----|----|
| ave | 83 | 76 | 77 |
| med | 83 | 76 | 77 |

|            |        |   |    |
|------------|--------|---|----|
| base pairs | abcdgh | f | 84 |
|------------|--------|---|----|

5

|         | abcdghf | e  |
|---------|---------|----|
| abcdghf | -1      | 82 |
| e       | 82      | -1 |

|            |         |   |    |
|------------|---------|---|----|
| base pairs | abcdghf | e | 82 |
|------------|---------|---|----|



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| Princeton University Fellowship Award              | 1994-1999 |


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LOOKING AT THE PAST: a Description of the Visible Characteristics of the NeyYeh Chapter of the *GoanTzyy*

Author:

  
(Signature)

Michael Reeve  
(Name in Block Letters)

August 16 1994  
(Date)