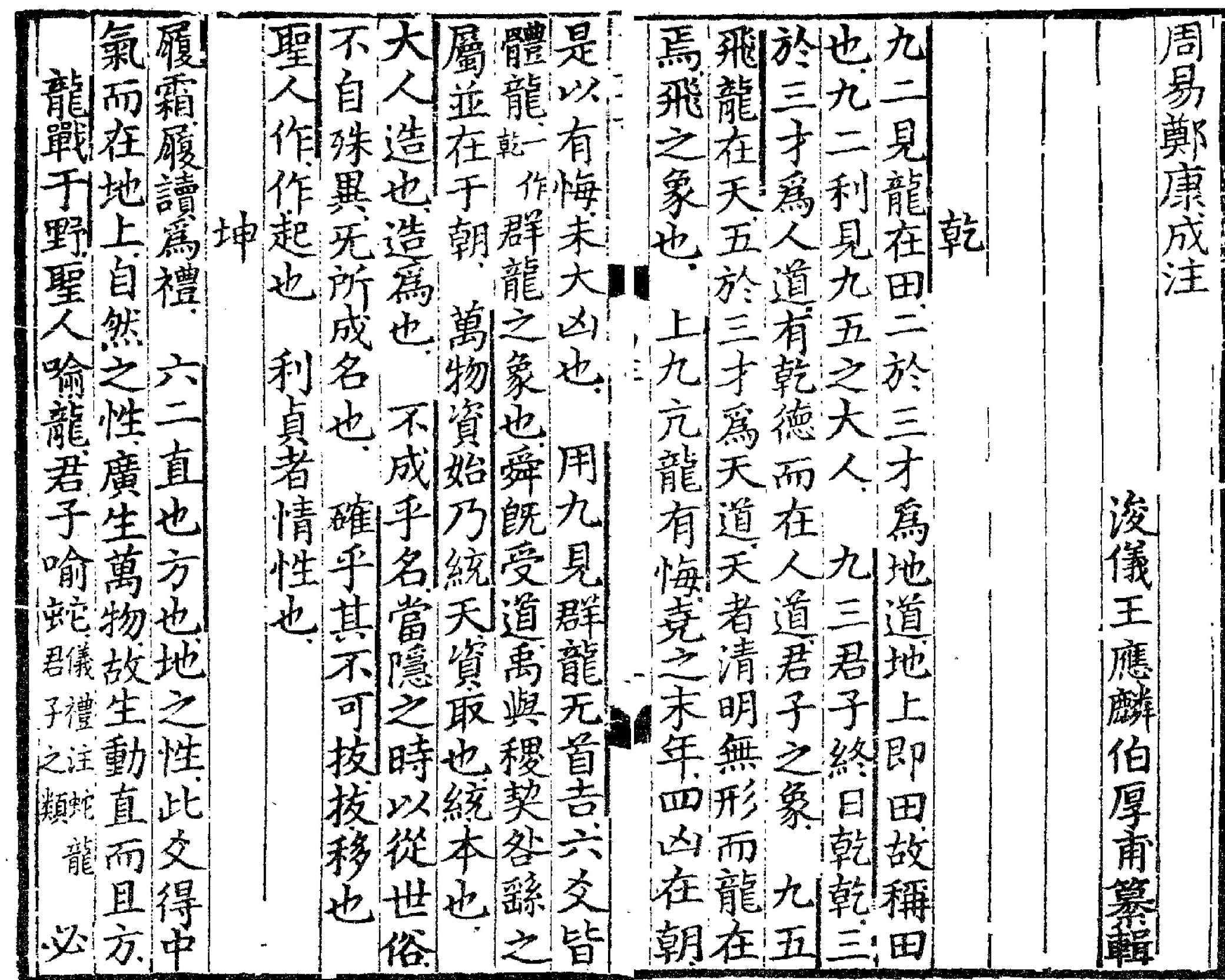
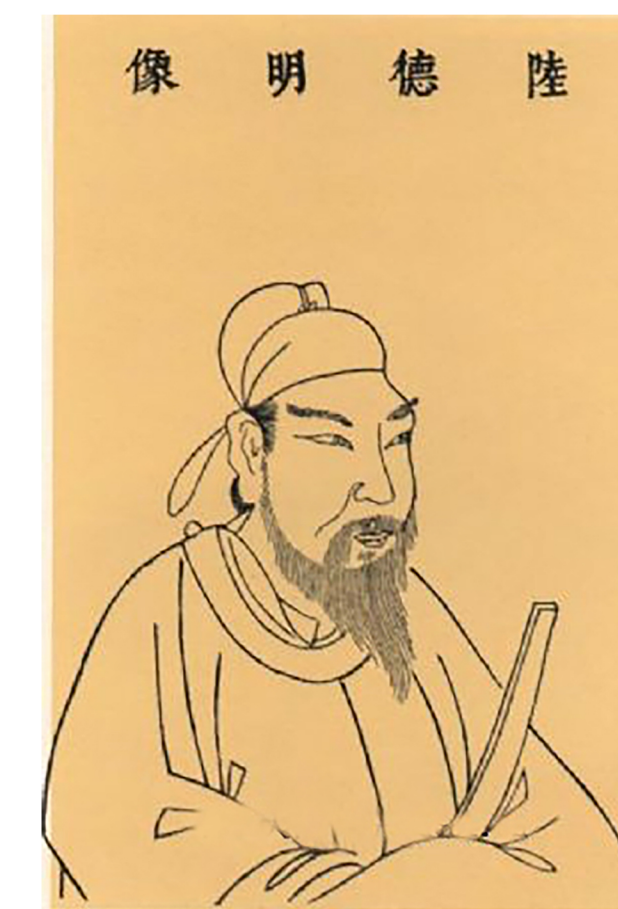


Digitizing the *Jingdian shiwen* 《經典釋文》: Deriving a Lexical Database from Ancient Glosses

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A thousand-year-old manuscript of the first page of the *Zhou yi* 《周易》, the first work included by Lu Deming in his ca. 589 C.E. *Jingdian shiwen*.



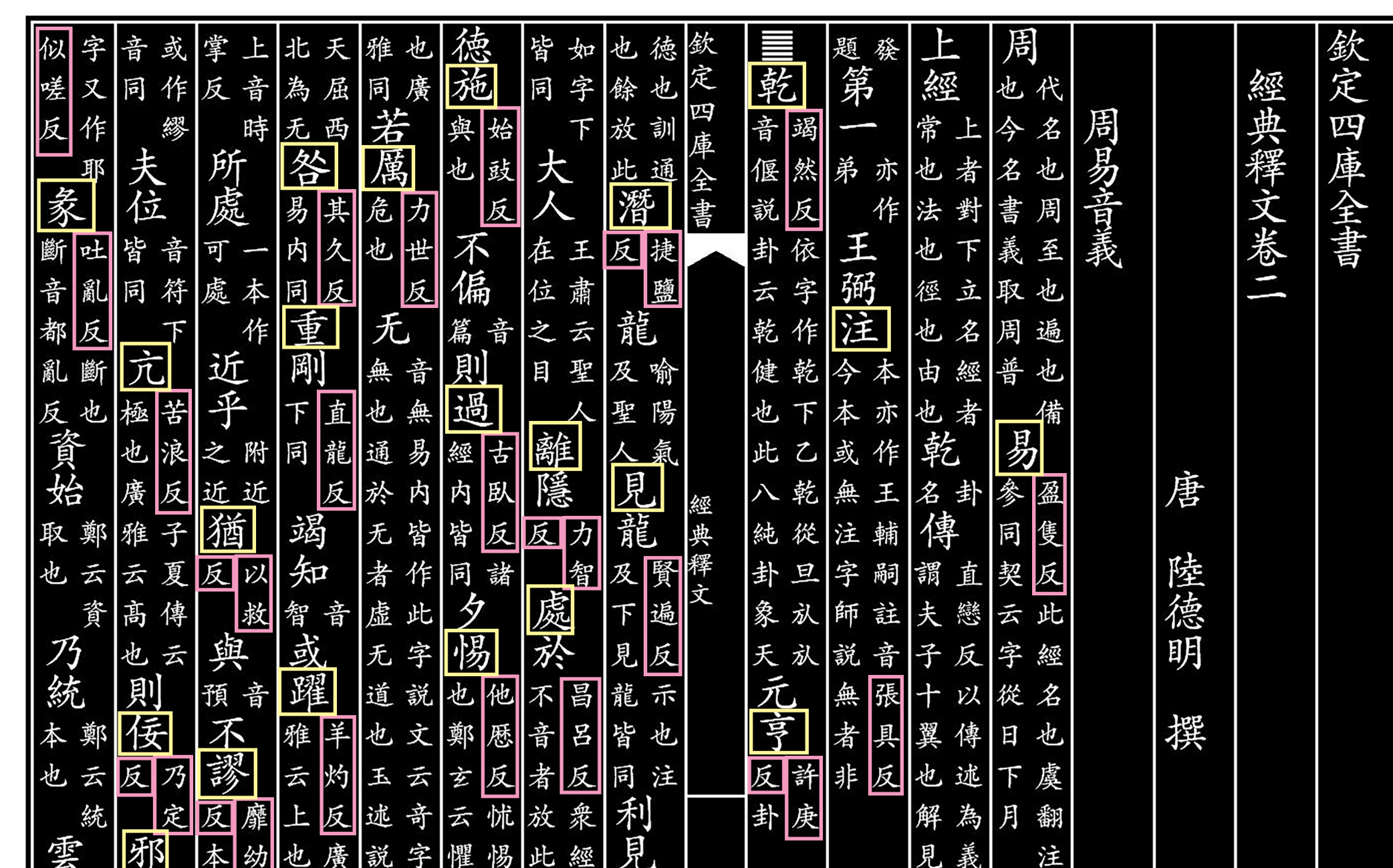
Lu Deming 陸德明 (556-627 C.E.)

Introduction

Sometime around the year 589, the scholar Lu Deming 陸德明 presented to the Chinese imperial library a new and important work: his *Jingdian shiwen* 經典釋文, or “Glosses on the Classics”. It contained Lu’s word-by-word exegeses, glosses and phonetic annotations (in the form of *fanqie* 反切 phonetic spellings) of fourteen of the greatest classics of ancient China. As the *Jingdian shiwen* predates all known extant Chinese rhyme dictionaries, it contains a wealth of extremely valuable information for modern scholars and linguists.

Unfortunately, the *Jingdian shiwen* has remained largely understudied, partly because it was composed in an expository style (rather than as a dictionary), and partly because until now the only proofed digital edition of the work has been the version included in the digital *Siku quanshu* 四庫全書 collectanea (shown below), accessible solely by subscription and via its own user interface which presents very limited search options.

Our project has thus been to create a plain-text Unicode edition of the entire *Jingdian shiwen* (30 volumes), fully annotated and designed specifically for inclusion in the online *Etymological Dictionary of Old Chinese* (edoc.uchicago.edu) so scholars will begin to be able to do targeted searches of its contents and compare Lu Deming’s glosses and exegeses with those of other early Chinese dictionaries and reference works.



The first page of the *Zhou yi* glosses in the *Jingdian shiwen* as rendered in the 1999 digital edition of the 1782 *Siku quanshu* 《四庫全書》 collectanea.

The yellow indicates the Headwords and the pink boxes are the *Fanqie* spellings. This image shows the difficulties inherent in annotating a complex, narrative text; Hantao copied over and individually annotated each of the 1100+ pages.

- J 經典釋文卷二
- B 周易音義
- S 周
- C 代名也周至也遍也備也今名書義取周普
- S 易
- F 盈隻反
- C 此經名也虞翻注參同契云字從日月
- S 上經
- C 上者對下立名經者常也法也徑也由也
- S 乾
- C 卦名
- S 傳
- F 直應反
- C 以傳述為義謂夫子十翼也解見口(發)題
- S 第一
- C 亦作弟
- E 王弼注
- C 本亦作王輔嗣註音
- F 張良反
- C 今本或無注字師說無者非
- E 乾
- F 竭然反
- C 依字作乾下乙乾從且口音假說卦云乾健也此八純卦象天
- E 元
- F 許庚反
- C 卦也調通也餘放此
- E 潛
- F 捷靈反
- E 龍
- C 陰陽氣及聖人
- F 見龍
- F 賢遍反
- C 示也注及下見龍皆同
- E 利見
- C 注同如字下皆同
- E 大人
- C 下王肅云聖人在位之位
- E 離隱
- F 力智反
- E 處於
- F 昌呂反
- C 衆經不音者放此
- E 德
- F 始發反
- C 與也
- E 不偏
- C 音篇
- E 則過
- F 古臥反
- C 諸經內皆同
- E 夕
- F 他應反
- C 據揚也鄭口(玄)云懼也廣雅同
- E 若
- F 方世反
- C 危也
- E 无
- C 音無易內皆作此字說文云音無也通於无者虛无道也玉述說天福西北為无
- E 咎
- F 其久反
- C 易內同
- E 重剛
- F 直龍反
- C 下同
- E 竭知
- C 音智
- E 或
- F 羊均反
- C 廣雅云上也上音
- F 時堂反
- E 所處
- C 一本作可處
- E 近乎
- C 附近之近
- E 剛
- F 以救反
- E 與
- C 音預
- E 不應
- F 應幼反
- C 本或作響音同
- E 夫位
- C 音符下皆同
- E 亢
- F 苦浪反
- C 子夏傳云極也廣雅云高也
- E 則侯
- F 乃定反
- E 聖
- C 字又作耶
- F 似曉反
- E 案
- F 吐亂反
- C 斷也斷音
- F 都亂反
- E 資始
- C 鄭云資取也
- E 乃統
- C 鄭云統本也

Building a Notational System for a Narrative Text

One of the keys to turning the *Jingdian shiwen* into a database has been the development of a robust system of notations that both allow for modular expansion of each field in the database and also give the user the ability to read the original text as it was written. (Many of Lu’s exegeses contain references that are only comprehensible when one understands the larger context of the comment.) Each of the lines in the layout to the left has been given a unique sequential identifier (Line_ID), which allows the text to be broken into its constituent parts and then re-constituted as the user desires.

Notations:

E	Headword
B	Book title
S	Section
SS	Sub-Section
C	Commentary (usually on the Headword)
F	Fanqie 反切 spelling (usually of a character in the Headword)
T	Title (usually of a poem)
SC	Commentary on a Section (S)
SF	Fanqie 反切 spelling of a character within a Section (S)
SSC	Commentary on a Sub-Section (SS)
SSF	Fanqie 反切 spelling of a character in a Sub-Section (SS)
CF	Fanqie 反切 spelling of a character in a Commentary
CC	Sub-Commentary of a Commentary
(?)	follows a character that failed to render in Microsoft Word, usually shown as (), or a dot, or simply a space. (Note that (), which is the symbol used for a lost character in the original text, is completely different.)
(*)	usually follows a fanqie 反切 spelling (F, SF, SSF or CF) and indicates a problem in the text, either the choice of correct marks, semantic ambiguity, possibly mistaken characters in the original text, or others depending on the context.

Database Layout and Architecture

We decided to create a database with one main table and three subtables to allow for unlimited modular expansion of the data.

The **main table** contains the contextual information for each entry and is structured around the Headgraph field as the primary data point and Headgraph_ID as the primary key:

Line_ID | Headgraph | Headgraph_ID | Book | Book_ID |
Juan | Juan_ID | Section | Section_ID | Title | Title_ID

The three subtables are:

Table (F) for *fanqie* phonetic annotations:
Headgraph_ID | Fanqie_ID | Fanqie data | Fanqie_Type

Table (C) for Comments and Sub-comments:
Headgraph_ID | Comment_ID | Comment data | Comment_Type

Table (N) for Notes:
Headgraph_ID | Note_ID | Note data | Note_Type

Each of the three subtables expands dynamically, allowing for each Headgraph to be directly associated with an unlimited range of subdata. The Notes field contains both text annotations and hyperlinks to external references.

User Interface and Sample Output from the Digital EDOC

The final stage of the project, to be completed in 2016, will be to create an additional section of the interface for the *Digital EDOC* so users can choose from the data fields in the *Jingdian shiwen* database along with other ancient and modern lexical data. Here is a general idea of how the final output will look to the user:

Graph 易

Fanqie1 盈隻反

Context Book: 周易音義 | Juan: 經典釋文卷二 | Section: 易

Comments Comment1: 此經名也虞翻注參同契云字從日月 (陸)

Notes Note1: This graph is from the title to the *Zhou yi*.
Note2: [Link to original text](#)

Fanqie2 羊質反

Context

Fanqie3 羊石反

Context

Fanqie4 夷鼓反

Context

