

# 清華簡文本復原

## Recovery of the Tsinghua Bamboo-Strip Texts

——以《清華大學藏戰國竹簡》一、二集為例

With Examples from *Tsinghua University Warring States  
Bamboo Manuscripts, Volumes 1 and 2*

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- 狹義的文本指由書寫（或印刷等）而固定下來的任何話語。通常具備載體、符號、內容三個要素。

In the strict sense, a text refers to any discourse that has been fixed in writing (or print) . It generally consists of three elements: medium, markings and content.

- 清華簡是戰國末期產生的文本，其形態為竹質墨書寫本。

The Tsinghua University bamboo manuscripts are texts produced toward the end of the Warring States period (ca. 475-221 B.C.E.); they feature ink writing upon bamboo.

- 年代久遠及出土後經過輾轉流傳，其文本狀態已有較大的變化，因而只有經過科學的分析復原，才能部分恢復其本來面貌。

Being ancient and having passed through many hands after being unearthed, the state of the manuscripts has already undergone significant changes; thus only through scientific analysis and reconstruction has it been possible to reconstruct them in part.

- 文本復原的主要過程包括：  
載體保護、符號顯示、內容識別三個方面。

The main steps involved in the reconstruction of the texts include:

- 1) Preservation of the medium,
- 2) Display of markings, and
- 3) Identification of content.

# 載體保護 Preservation of the Medium

- 入藏狀況：竹簡表面色澤呈暗褐色，經檢測，有黴菌活體，水樣中的氯離子和磷酸根離子濃度較大，絕對含水率近百分之四百。

Condition when the strips entered Tsinghua: The surface of the bamboo was dark-brown. Upon investigation, active mold was discovered, chlorine and phosphoric acid ions were particularly dense, and the absolute moisture was nearly 400%.



- 緊急措施：浸泡蒸餾水，用季銨鹽類殺菌劑殺菌。

Emergency measures: The strips were soaked in distilled water, and ammonium salt fungicides were used to kill the mold.



- 竹筒表面清污：

Bamboo surface degradation:

- 鬆散的污泥覆蓋，用小毛筆輕輕一掃即可棄除。

We brushed off the easily-removed mud coating with short-haired brushes.

- 被粘性較強、較厚的粘土覆蓋，不能一次性剔除，只能先掃除表層，用水浸泡一段時間後再逐層剝除，需要反復三至四次才能除淨。

For the thicker and more firmly attached clay coating, it could not be removed with one pass, and at first we could only sweep away the top layer. After soaking for a time, we gradually removed the covering layer by layer, with 3 to 4 passes needed to completely remove and clean the material.

- 被各種沉澱物在漫長的歲月中形成的殼狀物覆蓋，已無法用毛筆剔除，只能用毛筆筆尖置於覆蓋物邊沿，然後用竹質小刀墊在筆毛上，刀尖對準覆蓋物進行剝除。

For the hard-shell-like coating that various sediments had formed over the years, brushes were of no use in removing it. We could only place the brush-tips along the edges, and then using a small bamboo knife to press on the hair of the brush we could peel off this coating.

- 用比竹簡稍長、稍寬的玻璃條為托板，將有字的一面朝下，用線將竹簡捆縛在玻璃條上。把刻有序碼的不銹鋼號牌也捆在玻璃條頂端，便於日後查找。放入口沿較寬的不銹鋼容器。

Strips of glass, a bit longer and wider than the bamboo strips, were used as supports. With the side of bamboo containing writing facing downward, we used threads to hold the bamboo strips to the glass. Stainless steel number-plates with catalogue numbers were also tied to the ends of the glass strips for ease of reference. The bamboo strips were placed into wide-lipped stainless steel trays.

- 竹簡清污用毛筆及眉筆進行。

Removal of surface material from bamboo strips with brush and eyebrow pencil.



- 覆蓋物揭剝前後對比。

Strips before and after surface material removed.



# 符號顯示 Display of Markings

- 文本符號包括文字及其它符號。

Markings found on the manuscripts include written characters and other marks.

- 符號顯示：目的是盡可能復原其清晰面貌。手段是拍照經過物理化學處理的竹簡影像。

Display of Markings : Our goal was to restore as much clarity as possible to the recto face of the strips: the procedure was take photographs to record the strips as they underwent chemical processes.

- 在一定的溫度條件下，用一定濃度的中性連二亞硫酸鈉水溶液作為脫色劑，加入一定比例的絡合劑，然後把要拍攝的竹簡浸泡其中，浸泡時間長短根據具體物件有所區別，再用蒸餾水浸漂，經過這樣處理的竹簡顏色變淺，大致恢復到原始狀態，與黑墨之反差較大，故字跡顯的較清晰，便可擺放到托板上拍攝。

Under fixed temperature, we used a specifically formulated sodium dithionite solution to bleach the color, adding in a specific amount of complexing agent, and then immersed the strip to be photographed in the solution. The amount of time in the solution depended upon the actual condition of the strip. After this, the strips were again soaked in distilled water. Use of this procedure lightened the color of the bamboo, roughly recovering its original appearance and increased the contrast with the black ink. Thus, the traces of the graphs became more distinct, allowing the strip to be placed on a brace and photographed.

- 托板以方形白色有機玻璃材料制成，對其表面要進行噴砂處理，以便消除有機玻璃板的反光。其上雕刻版心線及欄線。

Square, white plexiglass was used as the brace; the surface of the plexiglass was sanded in order to reduce its reflectivity. On the plexiglass were incised print lines and guide lines.

- 臨拍攝時，往竹簡表面噴水霧，使竹簡表面完全覆蓋上一層很薄的水膜，由於水膜的作用，使折光度相對均勻，避免光點的產生，也由於水的浸潤，墨蹟顯得更黑。

Before photographing, a fine mist was sprayed upon the recto surface of the strips, completely covering them with a thin layer of water, thereby resulting in an even focal length and no extraneous light reflections. Due to the infiltration of the water, the ink traces also appeared darker.

■ 脫色前後的比較：

Comparison of before and after color restoration:



- 拍攝方式包括：反轉膠片、數碼、紅外三種。  
Photographic methods included three types: print film, digital images, and infrared.



數碼與紅外拍攝效果比較



Comparison  
of Results  
of Digital  
and Infrared  
Photography

# 內容的識別

## Identification of Content

- 內容識別是復原工作的核心，採用逐級分類的方式進行。

Identification of content is the core of this reconstruction work; it proceeds in a step-by-step manner.

- 先按形制長短分類。清華簡長度10cm—47.9cm不等、寬0.4cm—1cm不等，同長度的簡，寬度亦有差別，例如同為46cm的竹簡，有的寬0.4cm—0.5cm，有的則達1cm。把大致同長度、同寬度的竹簡歸納在一起，同長度者又按不同寬度分組。
- First the strips were separated on the basis of length. The Tsinghua strips range from 10 to 47.9 cm long and 0.4 to 1 cm wide. Strips of the same length might also vary in width: for example, some strips with an identical length of 46cm were 0.4-0.5 cm in width while others were up to 1.0 cm wide. Strips with approximately the same length and width were placed together and further divided into subgroups on the basis of differences in width.

- 同長寬者文字之疏密程度亦有差別：如《清華簡》一集諸篇中，《皇門》字符小且密，《系年》相對疏稀，與它篇區別明顯。

Strips of identical length and width also showed differences in spacing between graphs: for example, among the texts in *Tsinghua Strips, Vol. 1*, graphs in the "Huang men" text were relatively small and densely spaced, while the "Chronicles" is less densely spaced, clearly different from other texts.

- 由於抄手或底本不同等原因，各篇的字符結構和書法風格也有差異，有的個性很鮮明。

Because the scribal techniques or textual sources varied, graphic structure and calligraphy in each text also displayed stylistic differences, some of the characteristics being quite striking.

- “余”字，《清華簡》一集各篇多寫作 ，唯《皇門》寫作 。

In the texts in Vol. 1, *yu* “余” is usually written ; only in the “Huang men” text is it written .

- “命”字，《清華簡》一集各篇多寫作 ，  
《保訓》寫作 ，《祭公》寫作 。

In the texts in Vol. 1, Ming “命” is usually written ; in the “Bao xun” text it was written  and in the “Zhai gong” text .

- “𠄎”字，《清華簡》一集各篇多寫作 ，而  
《保訓》寫作 ，《皇門》寫作 。

In the texts in Vol. 1, the graph  is usually written , but is written  in “Bao xun” and  in “Huang men”.

《保訓》字體多與眾不同者，除上文所見，又如“佳”作 、“於”作 、“受”作 等。受秦晉字體的影響。字體也是分類的依據。

Graph shapes in “Bao xun” were generally in uncommon forms; besides the abovementioned, *wei* 佳 is , *yu* 於 is , and *shou* 受 is .

- 受秦晉字體的影響。字體也是分類的依據。

These graphs show the influence of Qin-Jin forms. Thus, division of texts can also be based on graphic form.

- 按具體內容劃分篇章：

Texts can be separated based on actual contents:

- 時代背景。斷代、跨時代。

Chronological background: Periodization and Cross-periodization.

- 中心議題。

Main topic.

- 主要人物。

Important personages.

- 再者是排序，殘簡綴合及定位。

Next is sequence, rejoining of broken strips and determination of place.

- 排序的依據及參照因素有多種，主要有：

The strips were sequenced according to many factors, principally:

- 按序碼排序：清華簡中有一部份簡設有序碼，通常書于簡背。序碼皆用數字表示，如“一”表示“第一”、“二”表示“第二”等。凡有序碼者即可直接用序碼排序。但要注意古人也有出錯時，如《系年》內容連貫但見兩個“五十二”序碼，又缺序碼“八十八”，皆為當時人筆誤所致。

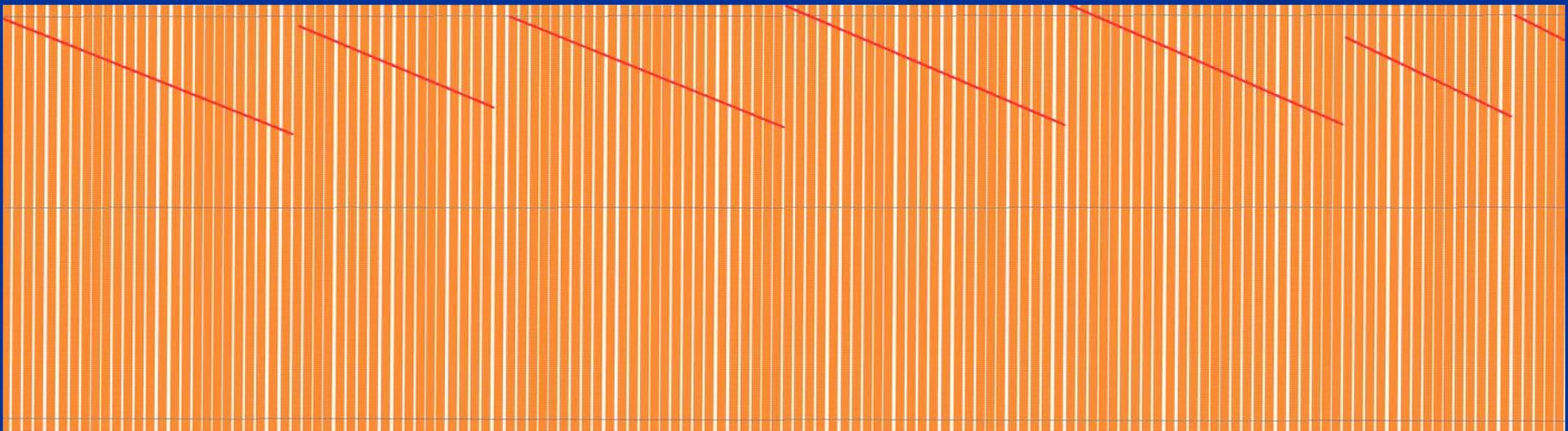
Sequence Numbers: In the Tsinghua corpus, a group of the strips contain written sequence numbers, usually on the verso. The sequence numbers are all represented numerically, such as “1” for “first strip”, “2” for “second”, and so on. All the strips with sequence numbers could be directly arranged according to number, but we had to pay careful attention to errors made by ancient scribes; for example, though the contents of the “Chronicles” is linked, however there are two “52”s and “88” is missing. These were mistakes made by scribes in antiquity.

- 據上下文排序：簡文內容之合理銜接是排序的根本，其中上簡末端與下簡頂端的簡文連貫與否是最重要的標誌。以《系年》之五十一簡至五十三簡為例：五十二簡與五十三簡背序碼皆署“五十二”，當為原抄寫者有誤所致，孰前孰後只能依簡文內容判斷。

Sequencing according to context: The basis for sequencing is the determination of reasonable links between textual contents; the most important guideline is that the end of the previous strip link to the beginning of the following strip. As strips 52 and 53 of the "Chronicles", for example, both have "52" written on the verso (this was an error by the original scribe), their sequence can be determined solely on the basis of textual content.

- 簡背刻劃斜線也是排序時的重要參照。今見清華簡《程寤》、《耆夜》、《金縢》各有一條斜線。而《系年》冊背有多達七條斜線，見下圖：

Another important criteria for sequencing is the presence of slanted lines across the verso of the strips. Texts “Cheng wu”, “Qi ye” and “Metal-Bound [Coffer]” all have a single slanted line, while the verso of the “Chronicles” text has up to seven slanted lines:



## ■ 殘簡的綴合與定位。

Rejoining and  
Placement of  
Broken Strips



- 綴合指多枚殘簡的拼連結合。以《程寤》7號簡為例：此簡由入藏編號為2134、2170、2310、2311、2146等五枚殘簡綴合而成，綴合的依據主要是內容連貫合理，斷口契合。

“Rejoining” refers to the piecing together of multiple strip fragments. To use strip 7 from “Cheng wu” as an example: This strip was created by joining together what had come to Tsinghua as five fragments, numbered 2134, 2170, 2310, 2311 and 2146. The rejoining was based primarily on the reasonable links in the content and the matching of the break points.



- 入藏編號2170與2310綴合後成形的“拜”字，2310與2311綴合後成形的“福”字，原來的每字筆劃都分居在兩個殘片上，綴合後筆劃對合，字乃成形，表明綴合準確無誤。

After rejoining what came to Tsinghua numbered as 2170 and 2310 to make the graph *bai* 拜, and strips numbered 2310 and 2311 to make the graph *fu* 福, where the original written graphs had been separated onto two strip fragments.

After rejoining, the strokes lined up and the graph became complete, indicating that the rejoining was accurate and precise.





- 殘簡定位：以《耆夜》第10、13號簡為例，10號簡上段與下段未能綴合，由於上段存上編痕，又與9號簡內容連貫，故居於頂頭位置，下段見中編痕及下編痕，故居下是必然的。

Placement of strip fragments: Taking “Qiyeye” strips 10 and 13 as an example, the upper and lower portions of strip 10 cannot be rejoined. However, due to the presence of binding-marks on the upper section and contextual links to strip 9, its placement can be ascertained. The lower section shows middle and lower binding-marks, thus it can be ascertained that it is a lower section.



兩段間隔一個半字位置。13號簡上段與中段未能綴合。同樣，由於上段存上編痕，內容又與12號簡連貫，故頂頭排。而中段見中編痕，所以只要將中編痕與左右兩簡的中編痕對齊即可，兩段間隔一個字空位。

Between the two sections is space for one and a half graphs. The upper part of Strip 13 cannot be rejoined with the lower part. Similarly, due to binding-marks on the upper section and a link with the content of strip 12, thus it can be ascertained to be the upper section. The center section shows center binding-marks; it can be placed on the basis of the binding-marks of the strips on either side, with the missing section between the two fragments consisting of space for one graph.

- 釋文與考證是文本復原的深入，是在復原的基礎上形成新文本的過程，有助於人們對原始文本的理解，今《清華簡》一、二集所見即是。

Transcription and verification are the end result of textual restoration. It is the process of forming new texts based on these reconstructions, adding to our understanding of the original text, as can be seen in the first two volumes of the Tsinghua corpus.

- 釋文包括文字與符號的釋讀。我們在文字釋讀時，通常以人們易看懂的今字體釋文。

Transcription includes the reading of both graphs and other graphic symbols. In transcribing characters, we commonly use modern graphs that are easy to read.

- 重文及合文的釋文在其後的括弧中表現。

Transcriptions of reduplication marks and ligature marks are indicated in parentheses.

- 為便於閱讀，除原釋文外，另加標點符號及編輯符號。而原簡原有的句讀符號、章節號等僅在放大圖版每簡左側的釋文中標出（此類圖版之釋文不加現代標點符號及通假字等）。

To increase readability, in addition to the original transcription, we add punctuation marks and editorial marks. When the original strips originally have reading marks or section marks, these are indicated in the transcription to the left of each strip on the enlarged photographs (in this transcription, modern punctuation or modern character forms are not used).

- 注釋是對文本內容的基礎研究，《清華簡》一、二集的注釋已盡可能簡略，基本內容包括字形分析、詞義解釋、語法特徵及重要歷史人物、歷史事件、歷史地理、典章制度等。

Explanatory notes constitute fundamental research on the textual contents. Explanatory notes to Volumes 1 and 2 of the Tsinghua corpus are as brief as possible; their basic content includes graphic analyses, semantic exegeses, grammatical peculiarities and notes on important historical personages, historical events, geographical locations, and laws and institutions.

- 清華簡各篇，凡原有篇題者以原篇題為名，無篇題者由整理者擬定。原篇題字數較多者，括注簡稱或傳世文獻所見相應的篇題，如《周武王有疾周公所自以代王之志》，依今本名《金縢》。

For the texts (*pian* 篇) of the Tsinghua corpus, whenever the original bears a title, these titles are preserved; for texts without titles, the editors made one. When the length of original titles is comparatively long, we give a simplified version in parentheses or when there are titles from corresponding transmitted texts, such as: “Record of King Wu of Zhou being Sick and the Duke of Zhou's Offer to Take the King's Place” corresponds with the modern chapter name “Metal-Bound [Coffer]”, which we used.

- 附錄，包括字形表及竹簡資訊表。字形表包括所有字形（含異體），表後附有筆劃及拼音檢字索引，便利查閱。

The Appendix includes a character shape table and an information table for the bamboo strips. The character shape table includes every character (and variant forms), with stroke number and *pinyin* indexes to facilitate looking up characters.

- 竹簡信息表。以表格形式列篇名、整理序號、入藏編號、長度、簡背原有編號及關於殘損說明的備註等。

The bamboo strip information tables are arranged in tables under the text name, giving editorial number and collection number, strip length, original verso strip numbers and notes describing any damage.

- 整理工作是在李學勤先生主持及具體指導下，集出土文獻研究與保護中心全體同仁之力完成的。

The editorial work was carried out under the leadership of Li Xueqin and his entire team from the Center for the Study and Preservation of Excavated Manuscripts.



謝謝！

Thank You!