

Collaborative Buddhist Text Annotation with Layered Document

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The Insularization caused by Copy/Paste

- 1) To create text annotation, we make a copy from an authoritative source, e.g CBETA, and paste it to the software (usually a text editor).
- 2) The copied text is in fact a new independent version, which cannot reflect changes in source text which are made after copy/paste.
- 3) As annotations are tied up with different version of base text. Annotations cannot be merged without human intervention.

Multiple Insularized File

如是我聞
一時佛在
舍衛國祇
樹給孤獨
園



如是我聞
一時佛在
舍衛國祇
樹給孤獨
園



如是我
聞。
一時，
佛在舍衛
國祇樹給
孤獨園



如是我聞，
一時，佛在
舍衛國祇
樹給孤獨
園.....



Single Version Approach

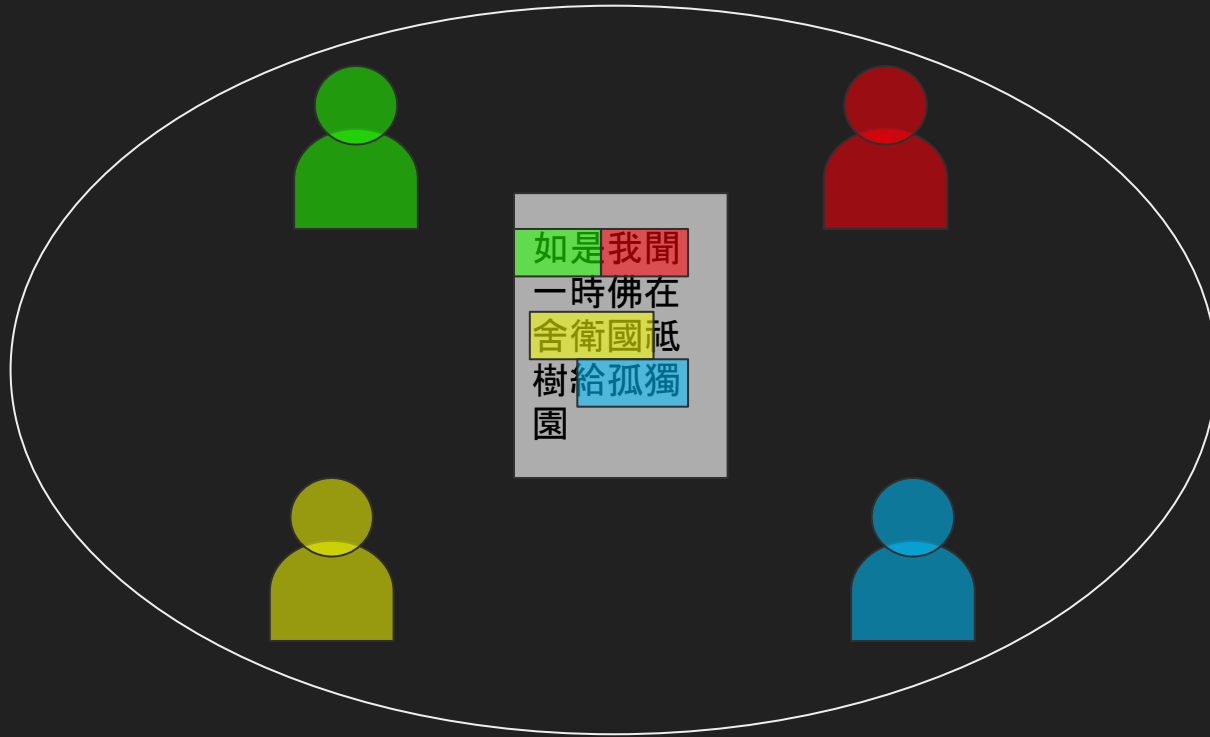
Do not make copy, everyone should work on same XML/TEI file.

To make sure everyone working on same text have identical clones:

- 1) Single-write-multiple-read policy.
- 2) Distributed Revision Control System (Github)

Even we can enforce everyone to work on same XML/TEI file. It will become a big mess soon enough. Imagine 50 students writing note on same text book.

Single Version Approach



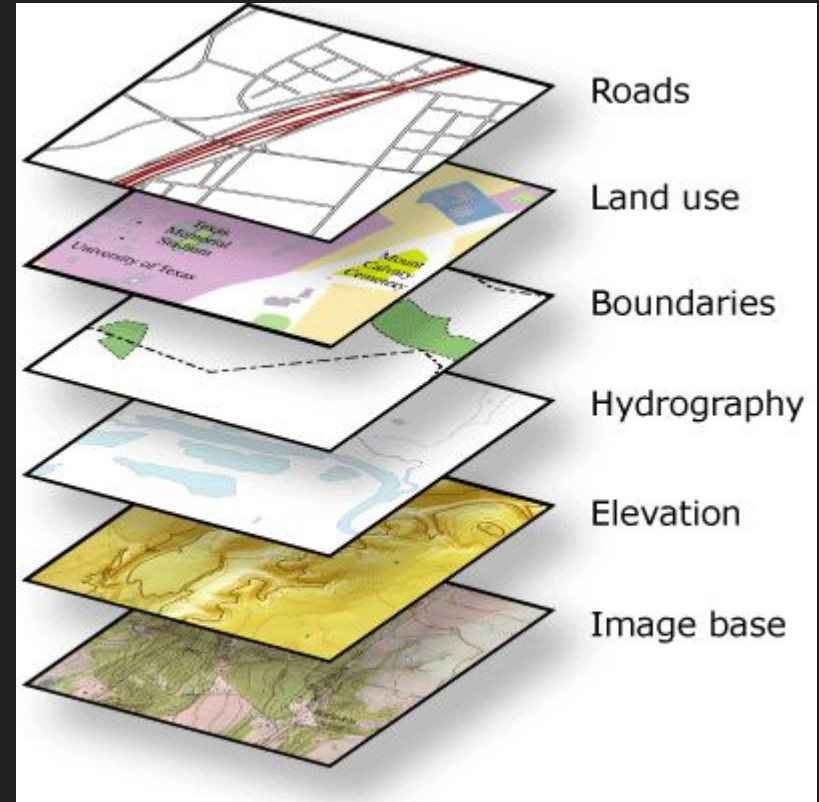
“Too many cooks spoil the broth, Too many tags spoil the file.”

Solution: Layered Document

Annotate on a separate layer.

layer works like a transparent film on top of base text, which can be added, removed and combined easily.

Annotator has full control to his own layer, but cannot change the base text and layers created by other annotators without permission.



Layered Document

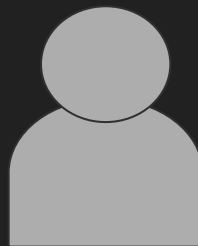
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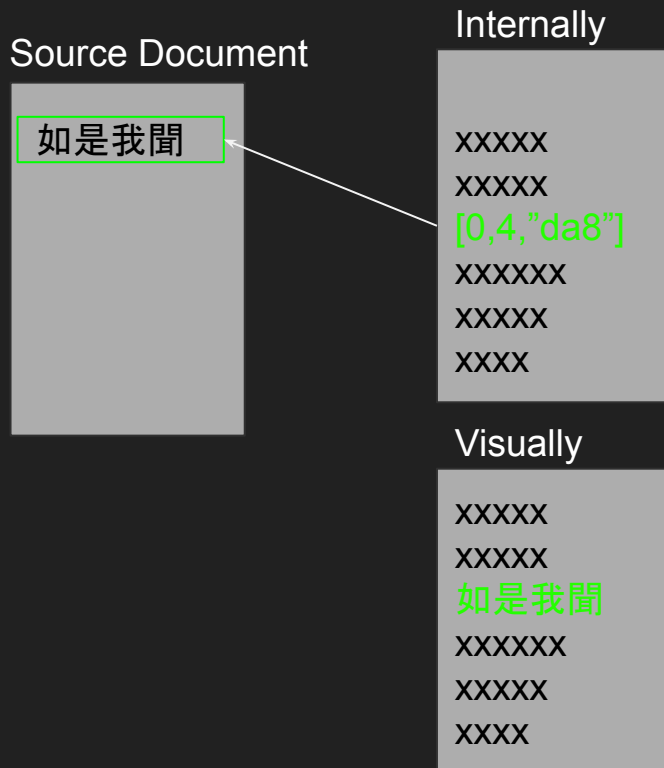
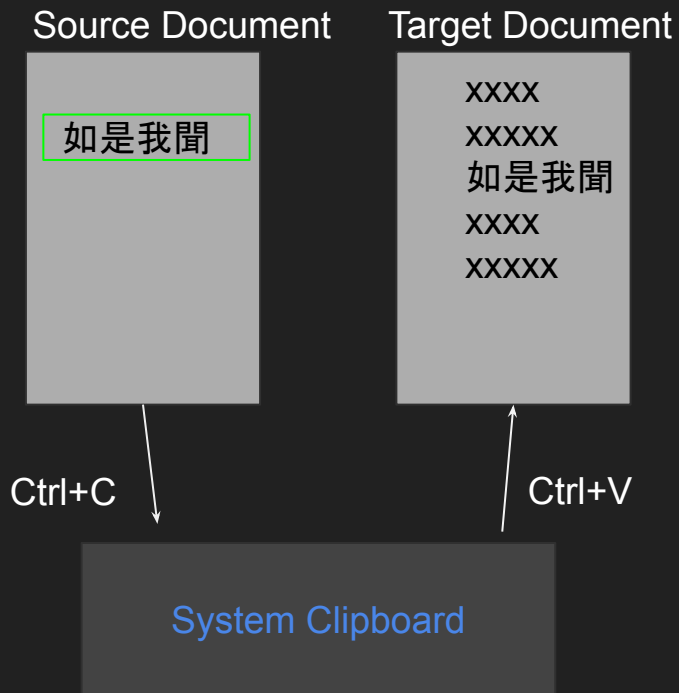
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園



Copy&paste

vs

Text pointer in Layered Document



A Prototype of Layered Document system

- 1) Web based layered text editor
- 2) 100% Javascript
- 3) Highly customizable
- 4) Optional tree structure (for Kepan)
 - a) XML has to be an valid tree structure in memory (as required by Document-Object-Model)
 - b) Tree structure prevents simple slicing and merging of XML files.

LIVE DEMO

This Prototype of Ksana Layered Editor is sponsored by

[Bodhiyana Foundation](http://www.bodhiyana.org) <http://www.bodhiyana.org>

Thank you for your attention

URL of this slide

<https://goo.gl/E0ja1v>