Digital Buddhist Library and Museum: The World of Xuanzang and Silk Road

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2000 PNC, UC Berkeley
玄奘西域行

玄奘西域行是由国立台湾大学哲学研究所主办，即含「文献、图象、史迹资料之搜集与研究」、「互动式、3D虚拟视景艺术设计与展示」、「数位博物馆资讯技术之研究」三个子计划，分别由中华佛学研究所、国立艺术学院科技艺术研究中心、国立台湾大学资讯工程研究所执行。
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Origin

- The main goal of this project is to develop a wide ranging contents, good retrieval technology, and professional visual designed Digital Buddhist Library and Museum, which contents (3 parts):
1.) Tang Silk Road (唐絲路)

The project will display Chinese culture. This rich culture reached a peak in the Tang dynasty (唐朝618-907 AD), so this era has been selected as the historical background for this project. And Silk Road (絲路) will be the geographic background.
2.) Xuanzang (玄奘)

One of the best model of the culture interchange of Eastern and Western regions in Tang dynasty is *The Great Tang Dynasty Record of the Western Regions* (大唐西域记 Da Tang Xi Yu Ji) written by the master Xuanzang (玄奘).

Therefore, master Xuanzang’s pilgrim trip will be used as the guide to this project.
3.) *Xi You Ji* (西遊記)

Another important content of the project will be to use the popular novel *A Journey to the West* (西遊記 *Xi You Ji*) as a reference to stimulate users’ interest.
In other words, the project plans to use the historical *The Great Tang Dynasty Record of the Western Regions* (西域記 Xi Yu Ji) as a base, contrasted to the popular *A Journey to the West* (西遊記 Xi You Ji). This will be different from traditional scholarly research projects, because it will be available to both educational organizations and society at large.
2. Background

1) CBETA
   (Chinese Buddhist Electronic Text Association)

2) CCBS
   (Comprehensive Cyberspace Buddhist Studies)

3) DBLM
   (Digital Buddhist Library and Museum)
1.) CBETA

The Chinese Buddhist Electronic Text Association (CBETA), is a project to digitized the hundred million words of the Taisho Tripitaka. The results may be viewed at [http://ccbs.ntu.edu.tw/cbeta](http://ccbs.ntu.edu.tw/cbeta).

This project, providing Buddhist literature for both popular and scholarly consumption, has already won commendations from many organizations and scholars at home and abroad.
The first 32 volumes of Taisho Tripitaka includes Sutra, Abhidharma and Vinaya will be completed in the spring of 2000
Chinese Buddhist Electronic Text Association (CBETA)
http://ccbs.ntu.edu.tw/cbeta

中華電子佛典協會
Chinese Buddhist Electronic Text Association

漢文

English

本協會由「北美印順導師基金會」與「中華佛學研究所」贊助成立，特此致謝！
本網頁建議使用 800 * 600 解析度瀏覽，以得到最佳視覺效果
請給我們您的寶貴意見 cbeta@ccbs.ntu.edu.tw

CBETA 2
十方人所思善惡。我悉知之。九嘗十方人我悉當內著佛道中。悉使發菩提意。十嘗十方人我悉當度脱之。是阿惟越闍菩薩。了不能及知阿惟越闍所行行所言心所念所作。了不能及知阿惟越闍事。亦不能知神足。不能知飛行。亦不能通知阿惟越闍菩薩當來過去今現在事。是為阿惟越闍菩薩教法。

佛說是時。和倫輸菩薩等。七萬二千人。皆大踊躍歡喜。各現光明。展轉相照。各各起正衣服。前以頭腦著地。為佛作禮而去。

佛說菩薩十住經

No. 285 [Nos. 278(22), 279(26), 286, 287]

漸備一切智德經卷第一

（一名十住又名大慧光三昧）

西晉月支三藏竺法護譯

初發意悅豫住品第一

聞如是。一時佛遊第六他化自在天上天王宮如意藏殊妙寶殿上。與大菩薩眾不可稱說。各從他方諸佛國來。普集會此。金剛藏菩薩等。時時金剛藏菩薩。承佛威神。以大慧光三昧正受。遇定意已。應時十方諸佛剎土。一一諸方。如十億佛剎滿中諸毫千億國。諸如來現。邊有菩薩。其餘各有金剛藏藏。十方亦然。皆同二號。時此諸佛。俱讚曰。善哉善哉。汝乃以此大慧光菩薩三昧。而以正受。在
Combined Dictionaries of
East Asian Buddhist Terms
and
East Asian Literary Terms
2.) CCBS

Since 1995, “The Comprehensive Cyberspace Buddhist Studies [http://ccbs.ntu.edu.tw]” at National Taiwan University has established many Internet databases, including over twenty websites on such topics as:

“The Retrieval Bibliography of Buddhist Works”, “The Digital Fulltext of Buddhist Works”, and “The Electronic Buddhist Tripitaka Series”. Over one hundred thousand entries and thousands of full texts are included in these bases, which have earned widespread praise.
Center for Buddhist Studies
College of Liberal Arts
National Taiwan University

Welcome to The CBS Comprehensive Online Buddhist Resources

Most of the materials are in Chinese, Big-5 Environment for WWW may be needed.

This database is sponsored by many contributors.

Buddhist BBS Digest HTML Version

Chinese Buddhist Electronic Text Association (CBETA)
(This database contents the Fulltext of Taisho Tripitaka and Retrieval System)
Buddhist Bibliography Retrieval System

This Database contains more than **80,000 entries** of Buddhist Texts, Journal articles, theses, book reviews, etc., in various languages, such as Chinese, English, Japanese, French and German....

- **Retrieval Functions:**
  - 1. Keyword Search
  - 2. Multi-Field Search
  - 3. Frequently Searched Words
  - 4. Automatic Data Update
Buddhist Bibliography Retrieval System (ccbs)
Full-text of Buddhist Articles

(CCBS)

The project will create a full-text database of articles from major Chinese and English academic books and journals.

The database is on-line for free retrieval.
Please choose one of the following types of lists:

- **by SOURCE** (journal, anthology, etc.)
- **by TITLE of ARTICLE**
- **by AUTHOR**
- **ENGLISH Articles**

If any questions or suggestions, please contact Aming Tu, cbs@ccms.ntu.edu.tw

Back to CBS Homepage

CCBS 5
On-line Lessons on Buddhist Canonical Languages (Lessons)

1.) On-line lessons on Sanskrit Buddhist scriptures.
2.) On-line lessons on Pali Buddhist scriptures.
3.) On-line lessons on Tibetan Buddhist scriptures.

CCBS 6
On-line Lessons on Buddhist Canonical Languages (ccbs)

tatra khalu punahi šāriputra sukhāvatyam loka-dhatau

adv. part. adv. N.m. N.f. N.m. N.f.

Abbreviations

Sentence Pronunciation
Sentence Structure
Declension & Conjugation
Translation
Vocabulary
Commentary
Literature on Buddhism in Taiwan
3.) DBLM

DBLM is maintained in cooperation between the Buddhist Studies Information Network Center, Chung-Hwa Institute of Buddhist Studies and National Taiwan University to provide access to Buddhist information worldwide through the Internet.
Digital Buddhist Library and Museum

Comprehensive Cyberspace for Buddhist Studies

Center for Buddhist Studies, National Taiwan University

Chung-Hwa Institute of Buddhist Studies, Dharma Drum Mountain

American Mirror Site: MIT in U. S.  American Mirror Site: OHIOSTATE U
PanAsian Mother Site: CBS TAIWAN  European Mirror Site: HEIDELBERG

Chinese Buddhist Electronic Text Association (CBETA)
(This database contains the Fulltext of Taisho Tripitaka and Retrieval System)
At October 29, 1999, Ven. Sheng-yen, the founder of Chung-Hwa Institute of Buddhist Studies, and Dr. Chen Wei-jiao, the president of National Taiwan University, signed a contract for the cooperation of Digital Buddhist Library and Museum.

(This Internet Database was original created by Ven.Heng-ching http://ccbs.ntu.edu.tw.)
The cooperation between this Institute and National Taiwan University of Buddhist Digital Library and Museum and co-sponsor the Chinese Buddhist Electronic Text Association to create the CBETA Electronic Tripitaka.
TEI
Markup Electronic Buddhist Texts

（一）省略的寫法

实例(T12):

```xml
<byline type="Translator">...
<app n="?">...
  <lem wit="[?]">...
  <rdg wit="[?]">...
</app>
</byline>

DBLM 4
```
<lb n="1109c17"/>說：一切婆羅末不能扰乱，而能降伏諸婆羅末，
<lb n="1109c18"/>中，若諸善根於此法門，受持讀誦應為他說，
<lb n="1109c19"/>善能降伏一切婆羅末。施諸有情利益等果，
<lb n="1109c20"/>能得善勇猛。如是法門，非諸雜碎有情類手所
<lb n="1109c21"/>善之所致地。善勇猛。如是法門，是性開善種
<lb n="1109c22"/>善之所致地。善勇猛。如是法門，是性開善種
<lb n="1109c23"/>善之所致地。善勇猛。如是法門，是性開善種
<lb n="1109c24"/>善之所致地。善勇猛。如是法門，是性開善種
<lb n="1109c25"/>善之所致地。善勇猛。如是法門，是性開善種
<lb n="1109c26"/>善之所致地。善勇猛。如是法門，是性開善種
<lb n="1109c27"/>善之所致地。善勇猛。如是法門，是性開善種
<lb n="1109c28"/>善之所致地。善勇猛。如是法門，是性開善種
<pb id="T07.0220.1110a" n="1110a01"/>
所受用故而現在前。唯為調(t) REPL e n="111001">
<lem>善</lem><rdg>
写【序】【明】条</rdg></app>聰慧天所用
<lb n="1110a02"/>用而見前也，如是善根緣起天眾無壞
<lb n="1110a03"/>重修諸德之時，如是善根緣起天眾無壞
<lb n="1110a04"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a05"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a06"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a07"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a08"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a09"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a10"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a11"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a12"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a13"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a14"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a15"/>善士人帝乃能受用此法法門，謂能聰慧、
<lb n="1110a16"/>善士人帝乃能受用此法法門，謂能聰慧、
8) They entered into the principle of concentration, they weakened, reduced (jīrṇa-kleśā) their afflictions (passions), they are purified. All the known things are confidently believed to be void from the beginning. They are rich in knowledge, deed and power, they exert themselves eternally to benefit worldly people. Indeed these sons of Sugata, the high-souled ones, have tranquillized sin (sāntapaṇa mahātmāḥ).

(R. p. 47, Ko. p. 96) Vajragarbha

Bodhisattva said "0 honorable sons of the Conqueror, every Bodhisattva who has well fulfilled the path (of stage) in the fifth Bodhisattva-stage enters into the sixth Bodhisattva-stage. He enters into the sixth
3. Sub-Projects

The World of Xuanzang and Silk Road is one of the DBLM's projects; this Digital Museum project consists of three sub-projects sponsored by different academic groups:
3. Sub-Projects
Sub-Project 1

1.) The Study and Organization of Documents, Images, Geographical and Historical Records, by Chung-Hwa Institute of Buddhist Studies
Sub-Project 2

2.) Visual Art Design of an Interactive, 3D Virtual Web Site, by National Institute of the Arts
Sub-Project 3

• 3.) Study of Information Technologies for a Digital Museum, by Department of Computer Science and Information Engineering, National Taiwan University
In short, the project will base on the organization of documents and historical records of the first sub-project.

Establishing an interactive 3D virtual digital museum for *The World of Xuanzang and Silk Road* of the second sub-project.

And the 3D virtual reality technology, GIS, and database retrieval system of the third sub-project.
4. Themes

- The Digital Museum has eight themes:
(1.) *The Great Tang Dynasty Record of the Western Regions* (大唐西域記 *Da Tan Xi Yu Ji*)

(2.) *A Journey to the West* (西遊記 *Xi You Ji*)

(3.) The Silk Road

(4.) Historic Collection (art/music)

(5.) Interactive Learning

(6.) Database Search

(7.) Reference Web Links

(8.) Buddhist Electronic Dictionaries
(1) and (2) reflect literary and historical viewpoints; (3) reflects geographical perspectives and includes video and 3D GIS virtual tours of the Silk Road;

(4) reflects artistic and cultural perspectives; (5) supports distance learning; and (6), (7), and (8) are reference and search tools.
The *Digital Museum* will use markup languages including HTML, SGML, and XML together with Java and Javascript.

Interactive displays will be supported with Java, DHTML, Flash, and Director.

The site will provide advanced and professional design quality. A preview of the web site can be found at [http://dlm.ntu.edu.tw/silk/](http://dlm.ntu.edu.tw/silk/) or [http://go.to/silkraod](http://go.to/silkraod)
5. Goals

In conclusion, the project has these goals:
1.)
To establish a multimedia information digital social science museum based on Xuanzang's *The Great Tang Dynasty Record of the Western Regions*. Multimedia digital information includes three-dimensional geographical models, information concerning geographical changes, historical materials, multimedia data, relics, and literature.

Goal 1
2.)
Using the Tang and Central Asia, Chinese and Indian cultures as background, the site will cover educational and research functions to link social science research and information technology in a social science digital museum.
3.)
Based on the popular appeal of *A Journey to the West*, a lively multimedia show will attract a wide variety of viewers to the digital museum. People may use the Internet to travel across time and space as they learn.
4.)
The geography and relics of Central Asia will help to establish information technology for other social science digital museums, such as knowledge banks, geographical information systems, and information retrieval, display and dissemination.
Key Words:

Digital Museum, Digital Library, Silk Road, Xuanzang, 3D Virtual Reality, Visual Art, Geography and History Information, Geometry Information System, Retrieval System, Dublin Core, Metadata...