

The ATTCAT Project and Architectura Sinica



Zhuge Jing 諸葛净, Associate Professor, School of Architecture, Southeast University, Nanjing

Tracy Miller, Associate Professor of History of Art, Vanderbilt University

Yuh-Fen Benda, Asian Studies Librarian, Vanderbilt University



ATTCAT: Annotation and Translation of Traditional Chinese Architectural Terminology

- Digital encyclopedic dictionary and thesaurus of technical terms used to describe works of Traditional Chinese Architecture
- Brainchild of Zhuge Jing 諸葛净 (Southeast University, Nanjing), Zhang Jianwei 張劍葳 (Peking University, Beijing), and Alexandra Harrer 荷雅麗 (Tsinghua University, Beijing)
- 2016-2017: Concept developed by Zhuge Jing 諸葛净 and Ren Sijie 任思捷 (Southeast University) and Tracy Miller 梅晨曦 (Vanderbilt University)
- 2018, June: First workshop designed by Prof. Chen Wei 陳薇, Zhuge Jing 諸葛 净, Tracy Miller 梅晨曦, and Ren Sijie 任思捷 in June 2018.

# The ATTCAT Project



First workshop in June of 2018, second in June 2019 Participants in 2018

- 18 participants (plus Prof. Chen Wei who helped launch the workshop), 9 institutions represented
- 4 countries (China, US, Japan, Austria)

### Participants in 2019

- 26 participants, 13 institutions represented
- 5 countries (China, US, Japan, Austria, Germany)

### Results

- 33 terms edited and posted to the AS website
- 15+ terms currently being added

# The ATTCAT Project

# 2 Components

- Encyclopedic dictionary and thesaurus of technical terms related to Traditional Chinese Architecture, with images
  - a. Pronunciations of terms in Pinyin and Wade-Giles romanization
  - b. Traditional and Simplified Chinese renderings of characters
  - c. List of known translations of Chinese terms into English (other languages under consideration in the future), including sources for their use
  - d. Short definition of term as used in modern and pre-modern sources
  - e. Longer annotation of term with rich bibliographic references
  - f. Pictorial examples of terms held in image archive
- 2. Links to bibliographic references in Zotero, with tags to individual terms

Encyclopedic dictionary and thesaurus of technical terms related to Traditional Chinese Architecture, with images Architectura Sinica DYNAMIC SITE ARCHIVE ARCHITECTURAL TERMINOLOGY BIBLIOGRAPHY ABOUT search

URI https://architecturasinica.org/keyword/k000064

🚔 🕹 TEI/XML



Sage Mother Hall, Jinci 晉祠聖母殿 (1038-1087), corner and leveling pillars 角柱,平柱; photo: Zhuge Jing Terms

- leveling pillars (preferred) (English)<sup>1</sup>
- 平柱 (Traditional Chinese)<sup>2</sup>
- 平柱 (Simplified Chinese)
- píngzhù (Pinyin)
- p'ing-chu (Wade-Giles)
- central bay column (English)<sup>3</sup>

#### Note

In traditional Chinese timber-frame architecture, refers to two eaves pillars framing the central bay on the sides of the building parallel to the roof ridge. Leveling pillars are used as a standard height for calculating the height of other pillars across the façade, as they increase in height from the center towards the corners of the building, allowing for an upward curvature of the eaves (shengqi). The term appears in the Yingzao Fashi (1103, SKQS ed., 5.4b) and also in documents written by officials during the Song Dynasty (960-1279) to describe the architecture of mausolea. Modern architectural historians use this term to describe central-bay pillars on all sides of a building dating from the Tang (618-907) to early Ming (1368-1644) dynasties. 平柱見於宋 《營造法式》,指建築下檐正面當中一間兩側的兩棵柱,也

#### Bibliographic entries using Zotero



Bibliographic entry on Zotero

ARCHITECTURA SINICA DYNAMIC SITE ARCHIVE ARCHITECTURAL TERMINOLOGY BIBLIOGRAPHY ABOUT

#### 《營造法式》辭解

URI https://architecturasinica.org/bibl/XVDZKH9M 🚔 🕹 TEI/XML 🕹 RDF/XML 🔢 Cite Corrections/Additions? Preferred Citation 陳明達, and 陳明達. 《營造法式》辭解. 天津: 天津大学出版社, 2010. https://books.google.com/books? id=t3wlygAACAAJ. View at: Full Citation Information Publication Title: 《營造法式》辭解 Title: "Ying zao fa shi" ci jie Author: 明達 陳 Author: 明達 陳 Author: Chen Author: Mingda URI: https://architecturasinica.org/bibl/XVDZKH9M URI: https://www.zotero.org/groups/architecturasinica/items/XVDZKH9M URI: https://www.zotero.org/groups/2267085/items/XVDZKH9M a See Also: https://books.google.com/books?id=t3wlygAACAAJ TextLang: Place of Publication: 天津 Publisher: 天津大学出版社 Date of Publication: 2010

Q

search

This work is licensed under a <u>Creative Commons Attribution 3.0 Unported License</u>. Copyright Vanderbilt University and the Contributor(s), 2014.

#### Bibliographic entry on Architectura Sinica



## The Srophé app—codebase used for Architectura Sinica

- Developed by a team of scholars interested in Late Antiquity and Medieval history and culture—David Michelson at Vanderbilt, Dan Schwartz at Texas A&M, and Tom Elliot at the Institute for the Study of the Ancient World
- An open-source gazetteer application for humanistic research
- Organized geographically
- Written by Winona Salesky using Text Encoding Initiative (TEI) and eXist DB

## Two primary components:

- eXist DB—Open source NoSQL database software based in XML
- Database in TEI Text Encoding Initiative—language used to encode individual entries (keywords or sites)
  - Set of guidelines for tagging text in XML
  - Began with encoding historical literature and other textual documents; used here in conjunction with GIS







LOGAR LINKED OPEN GAZETTEER OF THE ANDEAN REGION



### Future Developments:

- Optimize workflow for • contribution to Getty AAT and **AAT** Taiwan
- **Develop RDF output for terms** so they are discoverable through SPARQL query
- Add IIIF Viewer and encoded (semantic) image tagging
- Develop code so that images • can be imported from JSTOR Forum image groups

DYNAMIC SITE ARCHIVE ARCHITECTURAL TERMINOLOGY BIBLIOGRAPHY ABOUT Search

Sace Mother Hall Jinci 帶視眼份段 (1038-1087) corner and leveling nillars 角 柱,平柱; photo: Zhuge Jing

leveling pillars (preferred) (English) 平柱 (Traditional Chinese) • 平柱 (Simplified Chinese) píngzhù (Pinyin)

 p'ing-chu (Wade-Giles central bay column (English)

Note

今

ARCHITECTURA SINICA

平柱 LEVELING PILLARS URI https://architecturasinica.org/keyword/k000064

In traditional Chinese timber-frame architecture, refers to two eaves pillars framing the central bay on the sides of the building parallel to the roof ridge. Leveling pillars are used as a standard height for calculating the height of other pillars across the façade, as they increase in height from the center towards the corners of the building, allowing for an upward curvature of the eaves (shenggi). The term appears in the Yingzao Fashi (1103, SKQS ed., 5.4b) and also in documents written by officials during the Song Dynasty (960-1279) to describe the architecture of mausolea. Modern architectural historians use this term to describe central-hay illars on all sides of a building dating from the Tang (618-907) to early Ming (1368 1644) dynasties

平柱見於宋《變造法式》,指建築下槍正面當中一間兩側的兩棵柱,也屬於檐柱 是用於計算生起,以確定角柱,及角柱與平柱間其它各柱高度的基準柱。平柱也見 於《思陵錄》、《宋會要輯稿》等宋代官員對於宋代皇陵建築的記錄。當代建築史 學者用此術語描述唐至明初的建築物,並泛指建築外機四面或殿堂式构架内部中心 間間面側的柱

(Zhuge Jing 諸葛净, ATTCAT Project 2018 Sources and Contributors Related Terms

```
生起 shēngq
角柱 jiǎozhù
```

機柱 vánzhů

```
Works Cited
```

Any information without attribution has been created following the Syriaca.org 1 ATTCAT 2018 <sup>2</sup> 4b., 4b.; 111., 111.; 88., 88. <sup>3</sup> 63., 63.

Broad Match: Building I	Frame
-------------------------	-------

How to Cite This Entry

\* 平柱 leveling pillars\* in Architectura Sinica last modified date in 2018-03-21-04:00 format here, https://www.architectura.com/architectura.c

Semantic View (JSON, RDF, N3/Turtle, N-Triples ID: 300419294 Record Type: concept Page Link: http://vocab.getty.edu/page/aat/300419294 pingzhu (<columns by location or context>, columns (architectural elements), ... ponents (hierarchy name)) Note: In traditional Chinese timber-frame architecture, refers to two eaves pillars

Research Home . Tools . Art & Architecture Thesaurus . Full Record Display

Q

🛔 🛓 TEI/XML

framing the central bay on the sides of the building parallel to the roof ridge (typically the front side). Leveling pillars are used as a standard height for calculating the height of other pillars across the façade, as they increase in height from the center towards the corners of the building, allowing for an upward curvature of the eaves (shengqi). The term appears in the Yingzao Fashi (1103, Siku guanshu edition., 5.4b) and also in documents written by officials during the Song Dynasty (960-1279) to describe the architecture of mausolea. Modern architectural historians use this term to describe central-bay pillars on all sides of a building dating from the Tang (618-907) to early Ming (1368-1644) dynasties.

Art & Architec

Click the a icon to view the hierarchy

pingzhu (preferred,C,U,English-P,D,U,B) (Chinese (transliterated Pinyin v 平柱 (C,U,Chinese (traditional),UF,U,U) thout tones)-P D U U) (Chinese (simplified), UF, U, U) leveling pillars (<u>C,U,English,UF,T,U</u>) central-bay columns (pingzhu) (<u>C,U,English,UF,U,U</u>)

Facet/Hierarchy Code: V.PJ

#### Hierarchical Position:

**Objects Facet** Components (hierarchy name) (G) . components (objects parts) (G) <components by specific context> (G) architectural elements (G) . <structural elements and components for structural elements> (G) structural elements (G) .... <supporting and resisting elements> (G) columns and column components> (G columns (architectural elements) (G) <columns by location or context> (G) Additional Notes:

Chinese (traditional) ..... 平柱見於宋《營造法式》,指建築下檐正面當中一間兩側的兩棵 柱,也屬於檐柱,是用於計算生起,以確定角柱,及角柱與平柱間其它各柱高度的基準柱。平柱也 見於《思陵錄》、《宋會要輯稿》等宋代官員對於宋代皇陵建築的記錄。當代建築史學者用此術語 描述唐至明初的建築物,並泛指建築外槍四面或殿堂式构架内部中心開間兩側的柱。

#### Sources and Contributors: . [<u>ATTCAT</u>, <u>VP</u>]

. <u>Traditional Chinese Architecture Translation Project (2018-)</u> Tracy G. Miller, correspondence central-bay columns (pingzhu) ..... [VP] Guo, Visual Dictionary of Chinese Architecture (2002) 63 leveling pillars... [<u>VP</u>] Traditional Chinese Architecture Translation Project (2018-) Tracy G. Miller, correspondence .. [ATTCAT Preferred, VP Preferred] pinazhu.. aditional Chinese Architecture Translation Project (2018-) Tracy

G. Miller, correspondence

Subject: ..... [VP]

### ATTCAT 2018 Participants

白颖 BAI Ying (Assistant Professor, School of Architecture, Southeast University, China) 宝璐 BAO Lu (Master Degree student, School of Architecture, Southeast University, China) Campbell, Aurelia (Assistant Professor, Morrissey College of Arts and Sciences, Boston College, USA) 陈麓西 CHEN Luxi (Master Degree student, School of Architecture, Southeast University, China) 陈薇 CHEN Wei (Professor, School of Architecture, Southeast University, China) 陈欣涛 CHEN Xintao (Master Degree student, School of Architecture, Southeast University, China) 丁伯仪 DING Boyi (Master Degree student, School of Architecture, Southeast University, China) 胡石 HU Shi (Assistant Professor, School of Architecture, Southeast University, China) 贾亭立 JIA Tingli (Assistant Professor, School of Architecture, Southeast University, China) 刘妍 LIU Yan (Junior Fellow, SUSTech Society of Fellows in Liberal Arts, Southern University of Science and Technology, China) 任思捷 REN Sijie (Assistant Professor, School of Architecture, Southeast University, China) 梅晨曦 Miller, Tracy (Associate Professor, College of Arts and Science, Vanderbilt University, USA) 孙迎喆 SUN Yingzhe (Master Degree student, School of Architecture, Southeast University, China) 唐聪 TANG Cong (JSPS Research Fellow, Nara National Research Institute for Cultural Properties, Japan) 杨莞阗 YANG Wantian (Master Degree student, School of Architecture, Southeast University, China) 诸葛净 ZHUGE Jing (Associate Professor, School of Architecture, Southeast University, China) Zwerger, Klaus (Professor, Institute of Architecture and Design, Vienna University of Technology, Austria)

With the additional participation of:

荷雅丽 Alexandra Harrer (Assistant Professor, School of Architecture, Tsinghua University, China) 肖旻 XIAO Min (Associate Professor, School of Architecture, South China University of Technology, China) 张剑葳 ZHANG Jianwei (Assistant Professor, Peking University, China) 朱光亚 ZHU Guangya (Professor, School of Architecture, Southeast University, China)

### ATTCAT 2019 Participants



Bai Ying, Southeast University 白颖 東南大學 许玉棻 **范德堡大學** Benda, Yuh-Fen, Vanderbilt University Benda, Christopher, Vanderbilt University 克里斯·班達 范德堡大學 Campbell, Aurelia, Boston College 金田 波士頓學院 陈薇 東南大學 Chen Wei, Southeast University Chen Shu-Jiun, Academia Sinica 陈淑君 中央研究院 Ding Yao, Tianjin University 丁 
开 
于 
王 
走 
天 
津 
大 
學 荷雅丽 清華大學 Harrer, Alexandra, Tsinghua University Hu Shi, Southeast University 胡石 東南大學 Jia Tingli, Southeast University 贾亭立 東南大學 克里斯托弗 約翰 范德堡大学 Johns, Christopher, Vanderbilt University 刘妍 南方科技大學 Liu Yan, Southern University of Science and Technology Lorge, Peter, Vanderbilt University 彼得 羅格 范德堡大學 Lu Lu-Yen, Academia Sinica 卢履彦 中央研究院 Miller, Tracy, Vanderbilt University 梅晨曦 范德堡大學 Ren Sijie, Southeast University 任思捷 東南大學 Ruitenbeek, Klass, Asian Art Museum, Berlin鲁克思 柏林亞洲藝術博物館 Sun Xiaogian, Southeast University 孫曉倩 東南大學 Tang Cong, Chongging University 唐聪 重慶大學 Wen Jing, Tongji University 溫靜 同濟大學 俞莉娜 早稻田大學 Yu Lina, Waseda University Zhu Guangya, Southeast University 朱光亚 東南大學 諸葛淨 東南大學 Zhuge Jing, Southeast University Zwerger, Klaus, Vienna University 克勞斯 茨威格 維也納理工大學 of Technology Zuo Lala, United States Naval Academy 左拉拉 美國海軍學院



Thank You!