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VERNACULAR AND EARTHEN ARCHITECTURE TOWARDS LOCAL DEVELOPMENT

乡土未来

面向地方发展的乡土和土质建筑保护

Proceedings of 2019 ICOMOS CIAV & ISCEAH International Conference



2019年国际古迹遗址理事会
乡土建筑科学委员会与土质建筑遗产科学委员会
联合会暨国际学术研讨会论文集

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2019 ICOMOS CIAV & ISCEAH INTERNATIONAL CONFERENCE on “Vernacular and Earthen Architecture towards Local Development”

Organized by

- International Council on Monuments and Sites-International Committee on Vernacular Architecture (ICOMOS-CIAV)
- International Council on Monuments and Sites-International Scientific Committee on Earthen Architectural Heritage (ICOMOS-ISCEAH)
- Chinese National Committee for the International Council on Monuments and Sites (ICOMOS-CHINA)
- World Heritage Institute of Training and Research for the Asia and the Pacific Region under the Auspices of UNESCO (WHITRAP Shanghai)
- The Academic Committee of Historical and Cultural City Planning, the Urban Planning Society of China (ACHCCP-UPSC)
- Committee of Urban and Rural Built Heritage-ASC (CURBH-ASC)
- Tongji University, China

Co-Organized by

- Shanghai Tongji Urban Planning & Design Institute Co. , Ltd. (TJUPDI)
- Tongji Architectural Design (Group) Co. , Ltd. (TJAD)

Academic Supported by

- Urban Planning Society of China
- Architectural Society of China
- *Heritage Architecture*
- *Built Heritage*

Hosted by

- Pingyao County People's Government



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Preface 1

CIAV is an international platform for the dialogue and cooperation between professionals, experts, academics and students of vernacular heritage. We work primarily through our annual meetings and scientific conferences. CIAV fosters discussions and activities on national and regional levels.

CIAV consists of members with established expertise in the field of Vernacular Architecture. Our annual conferences are held to exchange experiences and new knowledge. This is of utmost importance for us professionals in order to further develop our competence in our fields of work. The term *Vernacular Architecture* includes a great variety of building types and sites, making it necessary for us to have knowledge in nearly all kinds of building construction and the land use methods.

We aim to ensure a multidisciplinary approach to the vernacular heritage by encouraging interaction between different disciplines within the framework of the annual CIAV scientific meetings and through CIAV membership. Establishing strategic alliances with other ISCs whose field of work are represented in vernacular architecture is an important aspect. This year's conference organised together with ISCEAH, International committee on Earthen Architectural Heritage, is an illustration of this work.

CIAV offers support for the cause of conservation for vernacular architecture around the world on different levels; international, regional, national and local. This may be moral support or exercising pressure to save endangered buildings and built heritage. It may also be technical support on international level to UNESCO and NGO's such as WMF and national and local levels to relevant authorities and organisations upon request.

CIAV was founded in 1976 following a resolution from the international conference for the conservation of vernacular architecture held in Plovdiv, Bulgaria, in 1975. There were 12 founding members from the 12 national committees (countries) and an additional 10 associate members. Today, there are 120 members (including 8 honorary members) within CIAV, from 52 countries.

At the moment CIAV is headed by architect Gisle Jakhelln (Norway) as President, architect Valeria Prieto (Mexico) as Vice President, architect Maria Inés Subercaseaux (Canada) as Vice President and architect Ivan Enev (Bulgaria) as Secretary General.

CIAV's field of work is wide. Over the years the committee has learned to enlarge its understanding of what 'vernacular' is — from single farmsteads and traditional village units to urban vernacular areas and settlements, to cultural landscape areas, and the links between the vernacular heritage and the geomorphologic conditions of the landscape.

This conference underlines the wide field of CIAV's work. I am thankful for the keen interest in organising this conference by ICOMOS China and in particular Professor SHAO Yong.



Gisle Jakhelln

President of ICOMOS-CIAV

June 26th, 2019

序 1

国际古迹遗址理事会乡土建筑科学委员会(下简称 CIAV)是一个供专业人士、专家、学者和学生之间就乡土遗产进行对话与合作的国际平台,主要通过年度会议和学术研讨会开展工作,在国家与地区层面促成讨论与活动。

CIAV 由在乡土建筑领域拥有丰富专业知识的成员组成。CIAV 每年会举办年度会议,旨在交流经验和最新技术。这对于专业人员进一步提升在工作领域的竞争力至关重要。“乡土建筑”一词涵盖了广泛的建筑类型和场地,这就要求委员会有必要了解几乎所有类型的建筑建造和土地使用方式。

委员会的目标是在 CIAV 成员之间、年度学术研讨会的框架之下,通过鼓励跨学科的交流互动,建立一个研究乡土遗产的多学科方法。与诸多研究特定类型乡土建筑的 ICOMOS 科学委员会建立战略联盟,也是 CIAV 的重要工作之一。今年的会议与土质建筑遗产科学委员会 (ISCEAH) 一起举办,即是一次较好的合作范例。

CIAV 为全世界范围的乡土建筑保护事业提供支持,涵盖国际、区域、国家和地方各个层面。这些支持或是道义上的支持,或是为了拯救濒危建筑与建成遗产施加压力,或是根据有关机构与组织的要求提供技术支援。服务对象既包括国际层面的联合国教科文组织、非政府组织(如 WMF),也有国家和地方层面的有关当局和机构。

CIAV 根据 1975 年保加利亚普罗夫迪夫举办的乡土建筑保护国际会议的相关决议,于 1976 年正式成立。初成立时,只有来自 12 个国家委员会的 12 名创始成员和 10 名准成员。今天,CIAV 已有来自全球 52 个国家的 120 名成员(包括 8 名荣誉委员)。

目前,CIAV 由挪威建筑师吉斯勒·亚克林担任主席,墨西哥建筑师瓦莱里亚·普里托和加拿大建筑师玛丽亚·伊内斯·叙贝卡索担任副主席,保加利亚建筑师伊万·埃涅夫担任秘书长。

CIAV 的工作领域很广。数年来,委员会不断扩展对“乡土”一词的内涵释义,从单一的农庄、传统的村落单元到城市中自发形成的区域与居民点,再到文化景观区以及乡土遗产与地理环境之间形成的强烈联系。

本次会议正凸显了 CIAV 工作的广泛领域。在此,我要十分感谢中国古迹遗址保护协会,特别是邵甬教授对这次会议组织的热情与持续投入。



吉斯勒·亚克林
国际古迹遗址理事会乡土建筑科学委员会主席
2019年6月26日

Preface 2

The International Scientific Committee on Earthen Architectural Heritage is a Committee from ICOMOS with 140 experts and associate members, from 41 countries. ISCEAH contributes to the development of better practice and methods for the protection and conservation of the world's earthen architectural, archaeological and cultural landscape heritage.

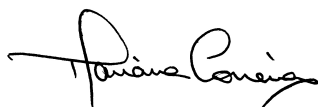
The objectives of the scientific program of ISCEAH are focused on: (1) Conserving and studying the standing, and in use, architectural heritage; (2) Conserving and studying the earthen archaeological environment; (3) Understanding the historic/ traditional techniques of earthen structures, including its impact on new earthen construction; (4) Researching the contribution of earthen architectural heritage to cultural landscapes and its relation to the intangible heritage and living traditions; and (5) Researching ancient/ historic a-seismic techniques, in addition to current research, to inform retrofitting of existing structures and appropriate new construction.

At present, ISCEAH is headed by Mariana Correia (Portugal) as President; Maddalena Achenza (Italy) as Vice-President; Pamela Jerome (USA) as Secretary-General; Shao Yong (China) as Treasurer; Ione Stiegler (USA), as In Use Chair; Jorge Aching (Peru), as Archaeology Chair; Bakonirina Rakotomamonjy (Madagascar), as Technology Chair; Ishanlosen Odiava (Nigeria), as Landscape Chair; and Claudia Cancino (Peru/USA), as Seismic Chair. The International Committee has been a platform of dialogue and knowledge exchange between professionals and academics from the 5 continents.

For almost 50 years, earthen architecture experts have gathered on different continents. The first symposium in 1972 in Iran, grew from a group of less than two-dozen people to an International Conference with 750 people attending TERRA 2016, in Lyon, France. In the near future, TERRA 2021 will take place in Santa Fe, USA, and TERRA 2024 in Cuenca, Ecuador, and more than a thousand experts will be expected to attend the events that became now a World Congress, under the aegis of ISCEAH. The Committee now contributes for World Heritage assessments regarding desk-reviews, technical evaluation missions and reactive monitoring missions to World Heritage earthen properties, and addresses assessments for the World Monument Fund regarding cultural nominations.

The organization of the ICOMOS CIAV-ISCEAH 2019, Joint Annual Meeting and International Conference “Vernacular & Earthen Architecture towards Local Development” reveals the commitment of ICOMOS-ISCEAH and ICOMOS-CIAV, with ICOMOS-China, to work together with WHITRAP and Tongji University, to protect cultural heritage and enhance best practices in the conservation of vernacular and earthen sites, and in particular, the World Heritage city of Pingyao. The successful collaboration of international and national institutions organizing CIAV-ISCEAH 2019 was just possible due to the commitment of professionals from ICOMOS-China and in particular of Prof. Shao Yong and her team. Thank you to all.

The International Scientific Committee of Earthen Architecture Heritage (ICOMOS-ISCEAH) joins efforts with other institutions to continue supporting capacity-building initiatives for and with communities; in Pingyao and around the world.



Mariana Correia

President of ICOMOS-ISCEAH

序 2

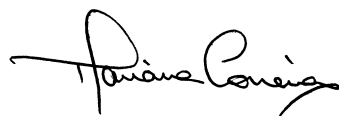
国际古迹遗址理事会土质建筑遗产科学委员会(以下简称 ISCEAH)由来自 41 个国家的 140 位专家委员与委员组成。ISCEAH 致力于为世界范围内的土质建筑、考古和文化景观遗产寻求更好的保护实践和方法。

ISCEAH 科学计划的目标着重于五大主题:(一)保护和研究既存且处于使用中的建筑遗产;(二)保护和研究土质考古环境;(三)通过研究物质特性及其对新的土质构造的影响,理解土质结构相关的历史及传统技术,并在这一过程中进行合作;(四)研究土质建筑遗产对文化景观,以及其与非物质遗产和生活传统之间关系的促进作用;(五)研究古代及历史上的抗震技术,并在当前研究中应用这些技术为既有结构的改造和适应性新建造提供借鉴。

目前,ISCEAH 由玛丽安娜·科雷亚(Mariana Correia,葡萄牙)担任主席,玛达莱娜·阿西娜(Maddalena Achenza,意大利)担任副主席,帕梅拉·杰罗姆(Pamela Jerome,美国)担任秘书长,邵甬(中国)担任司库。艾奥尼·斯蒂格勒(Ione Stiegler,美国)负责遗产利用主题,豪尔赫·阿辛(Jorge Aching,秘鲁)负责考古主题,巴科尼丽娜·拉库图马蒙吉(Bakonirina Rakotomamonjy,马达加斯加)负责技术主题,伊斯汉洛森·奥迪欧(Ishanlosen Odiaua,尼日利亚)负责景观主题,克劳迪娅·坎西诺(Claudia Cancino,秘鲁/美国)负责抗震主题。ISCEAH 已成为五大洲专业实践和学术界人士进行对话和知识交流的平台。

近 50 年以来,土质建筑领域的专家在世界各地齐聚一堂。1972 年在伊朗举办的首届研讨会还只是 20 人左右的团体,到 2016 年法国里昂举办的世界生土建筑大会(以下简称 TERRA 大会),已有 750 余名参与者。不久之后即将在美国圣达菲和厄瓜多尔昆卡举办的 2021 和 2024 年 TERRA 大会将会吸引一千余名参与者,成为在 ISCEAH 指导下的一个真正意义上的世界大会。如今,ISCEAH 还致力于世界遗产评估,包括针对土质世界遗产的书面材料的审查、技术评估考察和反应性监测考察,同时还为世界文物基金会的文化遗产保护申请进行评估。举办 2019 年国际古迹遗址理事会乡土建筑和土质建筑遗产科学委员会联合年会暨“面向地方发展的乡土和土质建筑保护”国际学术研讨会,体现了国际古迹遗址理事会乡土建筑和土质建筑遗产科学委员会,以及中国古迹遗址保护协会与高水准机构如亚太遗产中心和同济大学等共同合作保护文化遗产并对乡土和土质遗产地保护最佳案例(特别是世界遗产城市平遥)进行优化的承诺。2019 年国际古迹遗址理事会乡土建筑和土质建筑遗产科学委员会联合年会能够成功举办离不开各国际机构和国家机构通力合作,离不开中国古迹遗址保护协会的专家,特别是邵甬教授及其团队的辛勤付出。在此向所有人表示感谢。

国际古迹遗址理事会土质建筑遗产科学委员会将同其他机构一起共同努力,继续支持平遥乃至全世界针对社区的能力建设倡议和举措。



玛丽安娜·科雷亚
国际古迹遗址理事会土质建筑遗产科学委员会主席

Preface 3

The ancient city of Pingyao is an outstanding example of Han cities in the Ming and Qing dynasties (from the 14th to 20th century). It retains all the Han city features, provides a complete picture of the cultural, social, economic and religious development in Chinese history, and it is of great value for us to study the social form, economic structure, military defense, religious belief, traditional thinking, traditional ethics and dwelling form.

Since 1980s, China has started the establishment of the conservation theory of historic cities and the practices. The effort to conserve Pingyao ancient city, in which I was engaged then as programme director, is a typical and important example of integrated conservation in China. The inscription of the ancient city of Pingyao on the World Heritage List in 1997 has brought the city into a new phase of development. Pingyao County People's Government has worked with Tongji University, Shanxi Urban Planning & Design Institute and other universities and institutions since 2000 to carry out continuous research and practice to deal with the dual objectives of human-habitat heritage conservation and urban development. In addition to important and officially protected cultural relics, a large number of vernacular heritage have been rescued and protected through the effort, which also led to a multidimensional development in social, economic, environmental and cultural terms of urban and rural areas.

I am very pleased to know that the ICOMOS CIAV & ISCEAH 2019 Annual Meeting & International Conference on "Vernacular & Earthen Architecture towards Local Development" will be held in Pingyao. I hope that this conference will provide Pingyao with new development opportunities in the future, as well as the advanced theories, methods and techniques from international experience to conserve its abundant vernacular and earthen heritage resources. And importantly, this is an occasion where Pingyao would make its own contribution to the international community of heritage conservation, by building an important platform for ICOMOS and international experts, scholars, managers and technicians to exchange experiences and discuss challenges on the conservation of vernacular & earthen heritage.

Ms. SHAO Yong, a professor at Tongji University and my student, is in charge of the organization of conference and the publication of the conference proceedings, etc., which makes me feel so proud. I am glad to write a preface for this proceeding to express my sincere wishes for the inheritance of the spirit of heritage conservation and the undertaking from generation to generation, and I also expect more and more successful practices in heritage conservation that will emerge in the future.



RUAN Yisan

Professor of College of Architecture and Urban Planning, Tongji University

Director of National Historic Cities Research Center

Advisory Board Member of the Academic Committee of Historical and Cultural City Planning, the Urban Planning Society of China (ACHCCP-UPSC)

June 24th, 2019 in Tongji University

序 3

平遥古城是汉族城市在明清时期的杰出范例(14—20 世纪),它保存了汉族城市的所有特征,为人们展示了一幅中国历史非同寻常的文化、社会、经济及宗教发展的完整画卷,并且对研究这一时期的社会形态、经济结构、军事防御、宗教信仰、传统思想、伦理道德和人类居住形式等都具有重要价值。

1980 年代以来,中国开始了保护历史城市的理论探讨和实践,我当年主持的平遥古城保护即为典型的完整保护的重要案例。平遥古城在 1997 年成为世界遗产,从而进入新的历史发展阶段。从 2000 年以后,针对人居遗产保护与城市发展的双重目标,平遥县政府和同济大学、山西省城市规划设计院等高校、研究机构进行了持续不断的保护研究和实践的工作,除了重要的文物保护单位,也抢救和保护了大量的乡土遗产,并且也获得城乡社会、经济、环境和文化等方面的发展。

我非常高兴地看到 2019 年 ICOMOS 乡土建筑科学委员会与土质建筑遗产科学委员会的联合年会暨面向地方发展的乡土和土质建筑保护学术研讨会在平遥召开,希望平遥古城不仅通过此次会议获得新的发展契机,从国际经验中获得针对平遥丰富的乡土遗产和土质遗产保护的理论、方法和技术参考,同时也为国际的遗产保护贡献自己的力量,成为 ICOMOS 和国际专家、学者、管理者、技术人员等就乡土遗产和土质遗产的保护经验和挑战进行交流的一个重要平台。

同济大学邵甬教授主持了本次国际研讨会的组织、论文集的编辑出版等,作为她的老师我甚为宽慰。值此学术研讨会论文集出版之际,欣然为之序,祝愿遗产保护精神和事业能够代代传承,涌现更多的遗产保护成功案例。



阮仪三

同济大学建筑与城市规划学院 教授

国家历史文化名城研究中心主任

中国城市规划学会历史文化名城保护规划学术委员会 顾问委员

2019 年 6 月 24 日于同济大学

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