

AAP China Scholarship Council - CSC 2024 PROJET DE RECHERCHE DOCTORALE (PRD)

Titre du PRD : New considerations on Hoabinhian stone tool functions in tropical forest environment: a traceological approach to lithic collections from southern China and Southeast Asia

DIRECTION de THESE

Porteuse ou porteur du projet (*doit être titulaire de l'HDR*) :

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Unité de recherche : Code (ex. UMR xxx) et Intitulé : UMR 7194- Histoire naturelle de l'Homme préhistorique (équipe PreTrop)

Ecole doctorale de rattachement : ED227 - Sciences de la Nature et de l'Homme

Nombre de doctorants actuellement encadrés : 1

CO-DIRECTION de THESE (HDR) ou CO-ENCADREMENT (Non HDR) :

NOM :

Prénom :

Titre : Sélectionner ou Autre :

Section CNU :

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Unité de recherche : Code (ex. UMR xxx) et Intitulé :

Ecole doctorale de rattachement Sorbonne Université : Sélectionner ou autre :

Nombre de doctorants actuellement encadrés :

CO-TUTELLE INTERNATIONALE envisagée : OUI NON

DESCRIPTIF du PRD :

Ce texte sera affiché en ligne à destination des candidates et candidats chinois : il ne doit pas excéder 2 pages doit être rédigé en ANGLAIS

The Hoabinhian is one of the most representative prehistoric lithic technocomplex during the final Late Pleistocene-Middle Holocene (~40,000-4000 BP) in southern China and Southeast Asia, which represents a specific and localized adaptation of Anatomically Modern Humans (AMHs) in the tropical forest environment after their migrations out of Africa. While previous research primarily concentrated on the Hoabinhian's techno-cultural elements, such as tool typology, reduction sequences, and techno-functional considerations, there remains a significant gap in understanding the functional aspects of these "heavy-duty" cobble tools mostly unifacial. Particularly, the proposed use of these tools for wood or bamboo working has not been thoroughly investigated.

Traceology (use-wear and prehensile-wear analysis) can provide an answer to this crucial question for archaeologists: what were these massive Hoabinhian tools used for? This microscope analysis can be defined as the study of any kind of traces on prehistoric materials (vegetal, bone, shell, hide, etc.), and it's a highly effective method in revealing tool function and use, along with the study of residues, micro-polishes and surface modifications resulting from the duration of use, prehension, hafting, storage, production and taphonomy of archaeological artefacts. That is why traceology plays a fundamental role in a series of studies, from subsistence strategy and human behavior to reconstructing how humans adapted to the challenging forest environments, through the most durable human cultural expressions: lithic artefacts. Tropical Asia is an extraordinary area to study the relationship between human and forest, "lignic and lithic" and one that calls for such analysis.

This study project aims to answer the following key questions based on a systematical lithic traceology analysis of several Hoabinhian lithic collections. Key objectives of this research include:

1. Determining the specific functions and uses of Hoabinhian stone tools and the materials they were applied to, with a special focus on testing the "bamboo-working hypothesis" in southern China and Southeast Asia forests. But also more broadly, identification of the use of stone tools through residues and use-wear analyses crossed with experimental results.
2. Understanding the subsistence and tool utilization strategies of the Hoabinhian groups in tropical forest environment.
3. Assessing how the functional findings influence the existing typological classification and technological definition of Hoabinhian cobble tools. Redefining what a "hoabinhian cobble tool" is in tropical forest environment during the last period of the hunters-gatherers in the Far East.
4. Exploring the relationship between tool function and various types of cobble tools in terms of utilization, gesture, hafting, etc. Finding microscopic resolution for the classical "Hoabinhian unifacial cobble tool" and the other tool-kit components (split pebble tool, flake tool, chopper/chopping tool, pestle, etc.).
5. Examining the behavioral complexity, diversity, originality and adaptability of Anatomically Modern Humans (AMHs) in forest-based subsistence strategies, with a focus on exploring regional variations in tool manufacture, use, wear and function across Southeast Asia and southern China.

The study materials come from several major Hoabinhian sites excavated from southern China (Dedan cave, Tangbula cave, Xiaodong and Tangpa rock shelters in Yunnan Province, Guomo open-air site in Guangxi Zhuang Autonomous Region) and Southeast Asia (Laang Spean cave, Cambodia).

This thesis project is part of the French-Cambodian Prehistoric Project/MEAE at Laang Spean cave site (Prof. Hubert Forestier MNHN and Dr Heng Sophady, Royal University of Fines Arts & Ministry of Culture, Phnom Penh, Cambodia), and a continuous international scientific cooperation between the Muséum National d'Histoire Naturelle (UMR7194-HNHP/Pretrop team) and Wuhan University, China (Prof. Yinghua Li and Dr. Yudian Zhou), and other Chinese and Cambodian archaeological institutions in the related regions (Prof. Xueping Ji, Dr. Valery Zeitoun and teams), which lasts for more than 15 years.

Demands for Candidates

This is a three-year doctoral research project that mainly focuses on the microscopic analysis of Hoabinhian lithic tools in southern China and Southeast Asia and offers a unique opportunity to deepen our understanding of human adaptations during an important period in human history.

The candidate for this doctoral research project should possess a strong background in prehistoric Asian archaeology, with a focus on functional and experimental studies of stones tools from China or Southeast Asia (Master's degree in prehistoric archaeology or other relevant majors preferably in the functional study of stone tools - traces, manufacture & wear).

Proficiency required in English and basic knowledge of French are also essential for this role.

AVIS de l'Ecole Doctorale :

**Merci d'enregistrer votre fichier au format PDF sous la forme :
NOM Prénom_Projet CSC 2024.pdf**

**Fichier à envoyer par mail simultanément
à l'école doctorale de rattachement et à csc-su@listes.upmc.fr**