Author's Accepted Manuscript

From stucco to digital: topometric documentation of Classic Maya facades at Holmul

Alexandre Tokovinine, Francisco Estrada Belli



www.elsevier.com/locate/daach

PII: S2212-0548(17)30003-6

DOI: http://dx.doi.org/10.1016/j.daach.2017.04.004

Reference: DAACH56

To appear in: Digital Applications in Archaeology and Cultural Heritage

Received date: 18 January 2017 Revised date: 10 April 2017 Accepted date: 24 April 2017

Cite this article as: Alexandre Tokovinine and Francisco Estrada Belli, Fron stucco to digital: topometric documentation of Classic Maya facades at Holmul *Digital Applications in Archaeology and Cultural Heritage* http://dx.doi.org/10.1016/j.daach.2017.04.004

This is a PDF file of an unedited manuscript that has been accepted fo publication. As a service to our customers we are providing this early version o the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain

ACCEPTED MANUSCRIPT

From stucco to digital: topometric documentation of Classic Maya facades at Holmul

Alexandre Tokovinine^a, Francisco Estrada Belli^b

^aDepartment of Anthropology, University of Alabama

^bDepartment of Anthropology, Tulane University

atokovinine@ua.edu

festrad1@tulane.edu

Abstract

This article addresses the use of a structured light 3d scanner to document ancient Maya architecture. A rationale for the project is outlined along with some practicalities of operating the equipment in remote locations and archaeological tunnels. The two case studies describe the documentation of painted stucco friezes at the archaeological site of Holmul, Guatemala, by the Corpus of Maya Hieroglyphic Inscriptions of the Peabody Museum of Archaeology and Ethnology, Harvard University. Holmul buildings boast some of the most elaborate and wellpreserved stucco sculptures in the Maya world. The paper concludes with highlighting the current challenges in creating and using high-resolution 3d replicas for research and conservation purposes.

Introduction: saving ancient Maya heritage

Archaeologists working in the Maya area face formidable conservation challenges. The humid and hot tropical climate with its rapid wet-dry cycles, aggressive biota (microbial biofilms, fungi,

1

Download English Version:

https://daneshyari.com/en/article/4761563

Download Persian Version:

https://daneshyari.com/article/4761563

<u>Daneshyari.com</u>