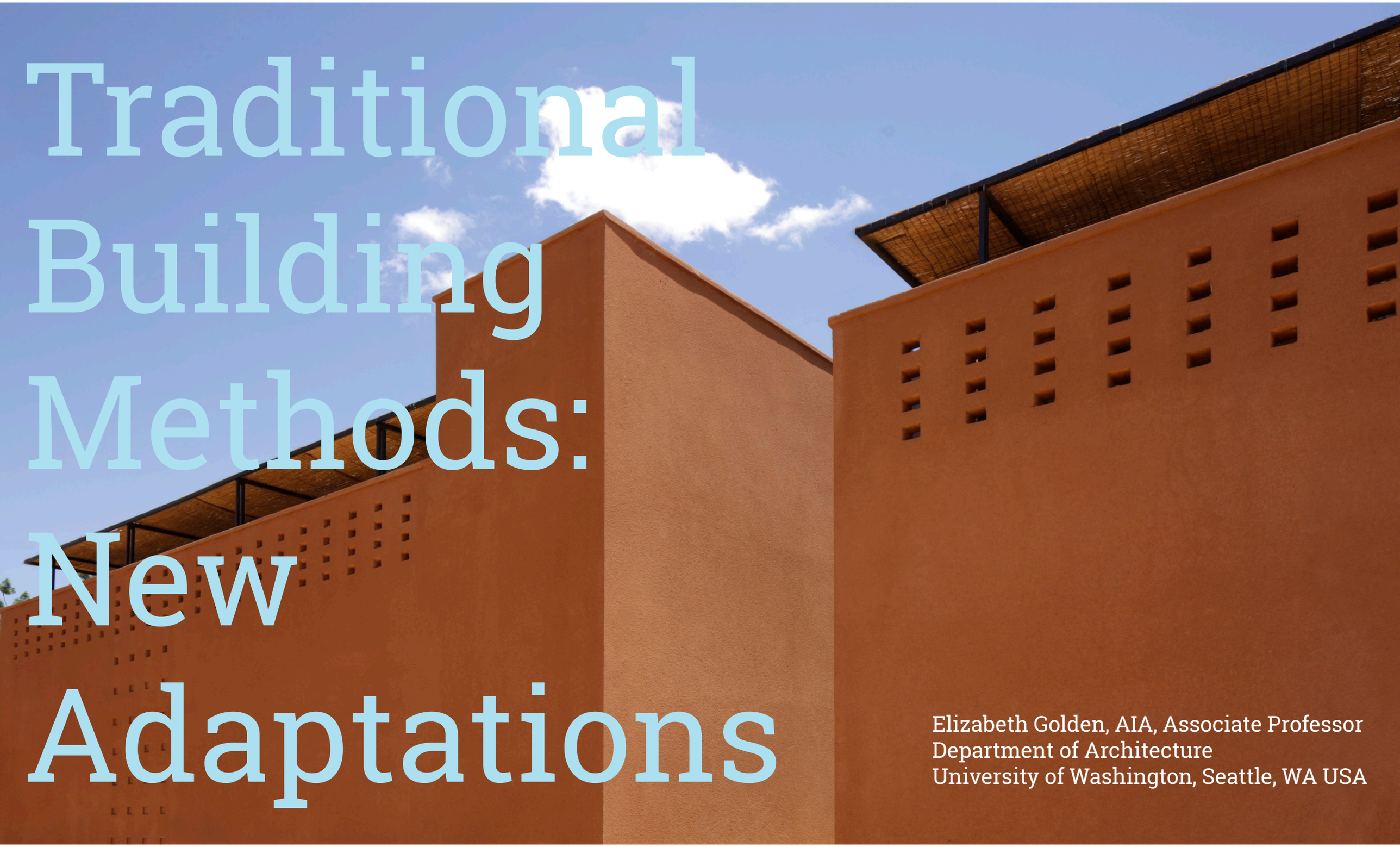

Traditional Building Methods: New Adaptations

Elizabeth Golden, AIA, Associate Professor
Department of Architecture
University of Washington, Seattle, WA USA

RESEARCH

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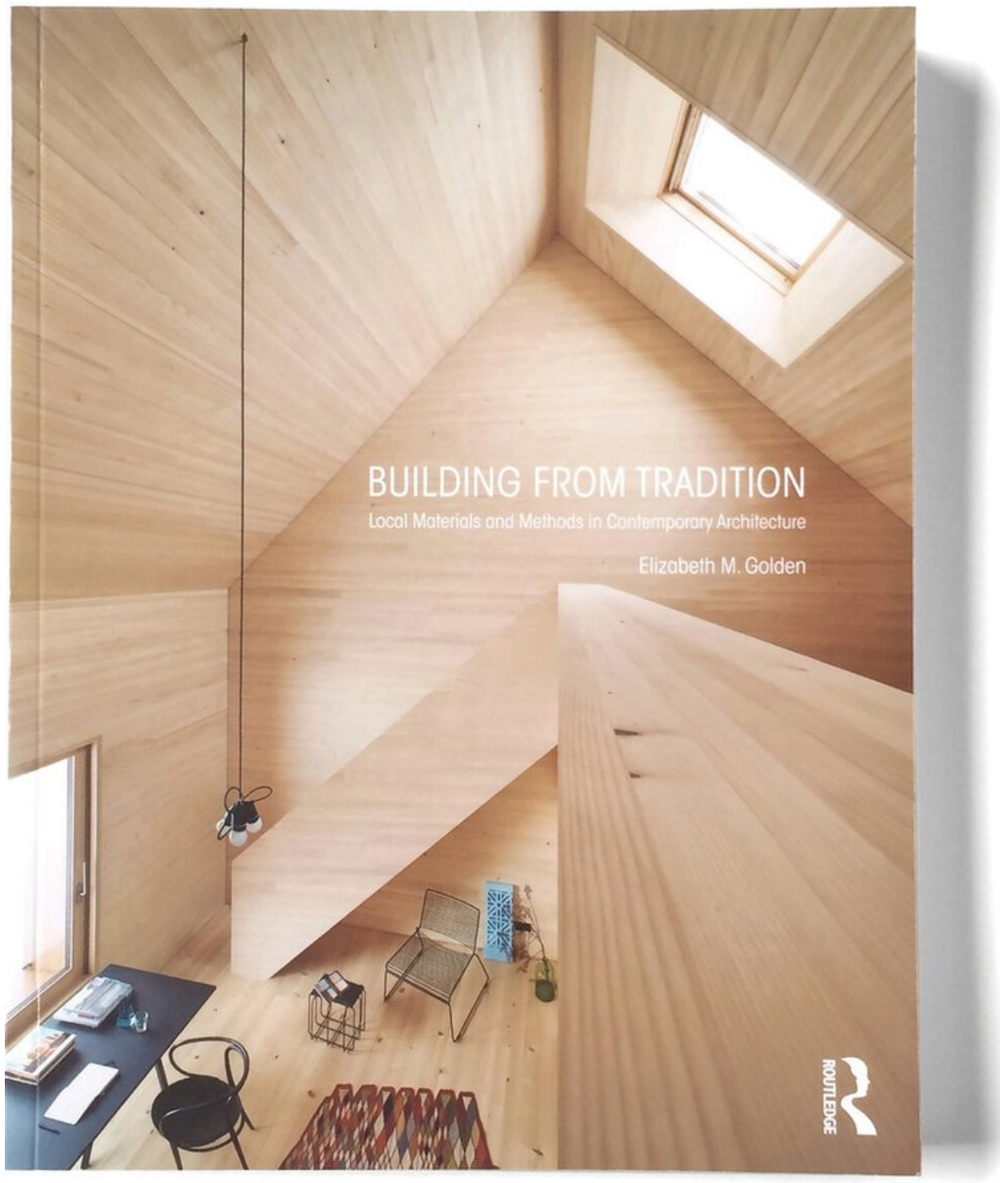

Teaching and research focuses on sustainable material systems and their potential to transform the built environment.

Building from Tradition: Local Materials and Methods in Contemporary Architecture is a critical analysis of traditional building practices and their contemporary resurgence in the context of globalization.

RESEARCH

Elizabeth M. Golden, AIA, Associate Professor
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Niamey 2000, Niger

united4design: Yasaman Esmaili, Elizabeth Golden, Mariam Kamara, Philip Straeter

Brick by Brick, Scottsdale, Arizona, USA

University of Washington + Arizona State University

INTRODUCTION

Traditional Building Methods: New Adaptations Seminar

Reinforced Concrete Frame/Masonry Infill

Dumaguete, Philippines

Wood Frame Construction

Phoenix, Arizona

INTRODUCTION

Traditional Building Methods: New Adaptations Seminar

UN Sustainable Development Goals

3. Good Health and Wellbeing
8. Decent Work and Economic Growth
9. Industry, Innovation, and Infrastructure
12. Responsible Production and Consumption

Evolution of Bamboo Construction in the Philippines

a
sustainable
future!

MATERIAL FUNDAMENTALS: Histories & Properties

Traditional Building Methods: New Adaptations Seminar

Rammed Earth Watchtower, Han Dynasty, Dunhuang, China

Rammed Earth Construction in Morocco

Clay Lamella Structure Magnified

PHYSICAL PROCESSES: Learning by Doing

Traditional Building Methods: New Adaptations Seminar

Adobe, Mortar & Plaster Workshop

Rammed Earth Workshop

Bamboo Workshop

CONTEMPORARY STRATEGIES: Sustainable Practices & Local Economies

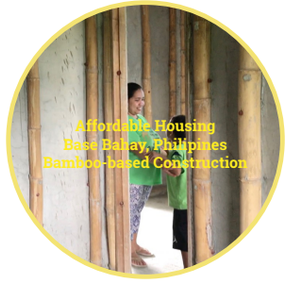
Traditional Building Methods: New Adaptations Seminar

Compressed Earth Block in Niger

Bamboo Frame Construction in the Philippines

Prefabricated Rammed Earth Panels in Switzerland

Niamey 2000
unite4design, Niger
Earth-based Construction



Affordable Housing
Base Balsay, Philipines
Bamboo-based Construction

Chapel of Reconciliation
Reitermann & Sassenroth, Germany
Earth-based Construction

Al Jahili Fort Renovation
Ziegert Roswag Seiler, UAE
Earth-based Construction

Wind & Water Bar
Vo Trong Nghia, Vietnam
Bamboo-based Construction

St. Bernard's Road
ModCell, UK
Straw-based Construction

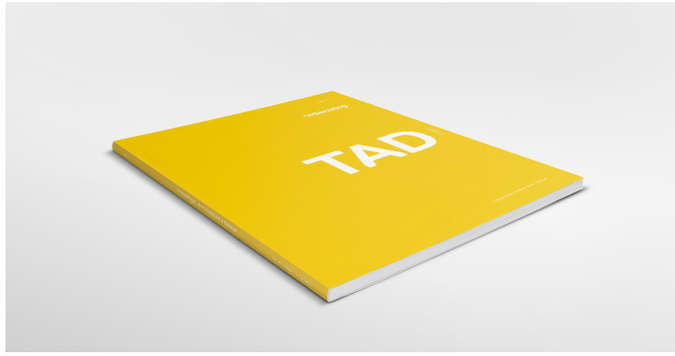
Quinta Daycare
Estudio Mumgo, Philippines
Bamboo-based Construction

Haus am Moor
Bernardo Bader, Austria
Wood-based Construction

Contemporary Global Precedents

IMPACT

Traditional Building Methods: New Adaptations Seminar



Structural Bamboo Building Codes

Built Work: Mariam Kamara & Yasaman Esmaili

Philippines Bamboo Workshop

△ Figure 4. (left) Fully exposed to elements, untreated, and in contact with the ground. Lifespan: six months to four years. (middle) Lifted off the ground and treated with boron salt for termite protection. Lifespan: up to fifteen years. (right) Protected from sun and water and treated with boron salt. Lifespan: thirty years or more.

△ Figure 5. (left) Informal settlement in Puente Piedra, Lima, Peru, August 2017. (right) Incremental home expansion, Esmeraldas, Ecuador, October 2017.

△ Figure 6. Bamboo plantation, Los Bancos, Ecuador, December 2017.

△ Figure 7. Panelized low-income housing next to main masonry home, Esmeraldas, Ecuador, November 2017.

Student Research: David Witte