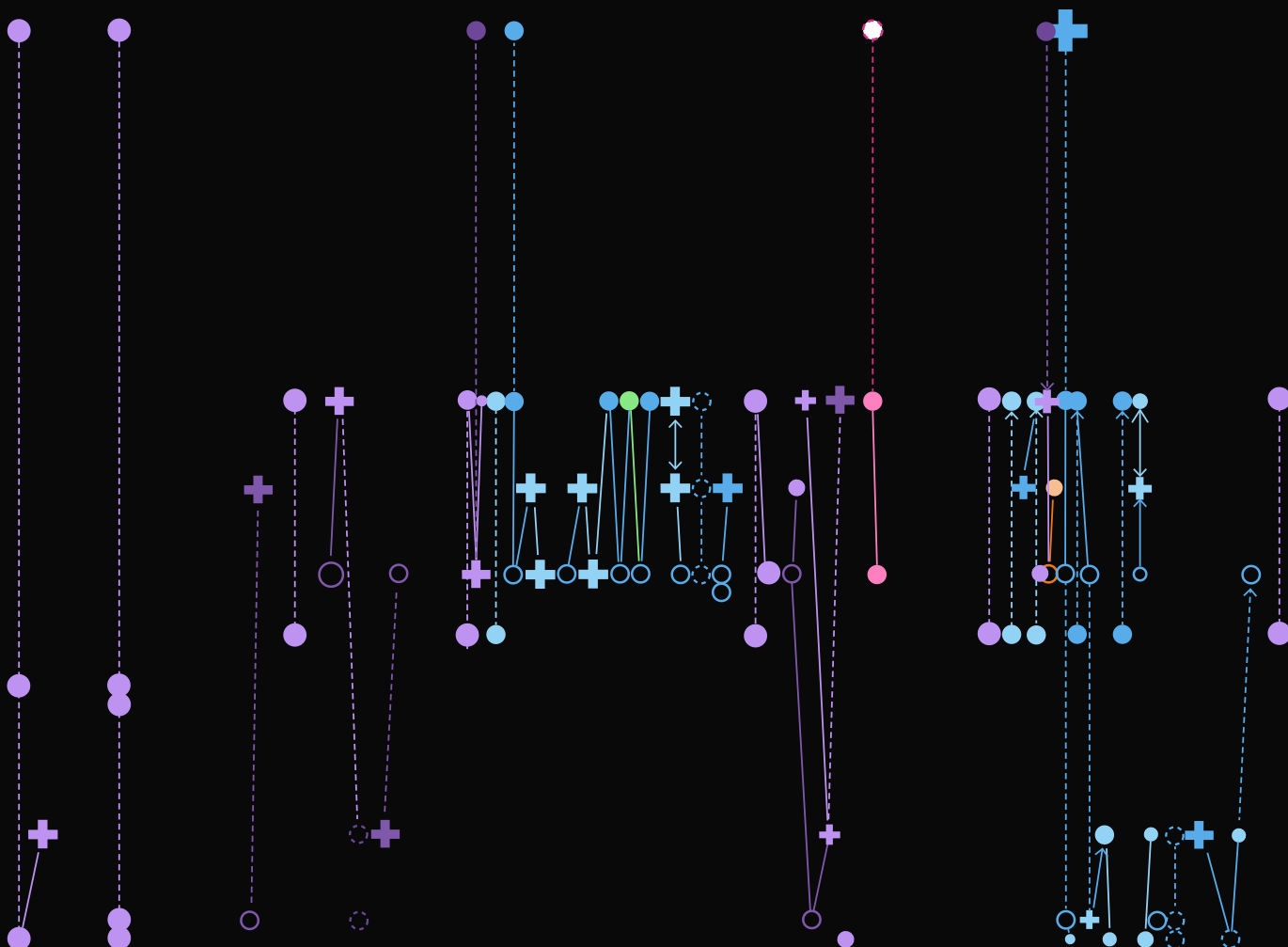


DOCTORAL DISSERTATION

Questioning the Construction Process of *“Public” Space* in Rural China

Architectural Agency in the Provision of Community Space
for Rural Revitalization. The Case of Zhaoshan.



Giulia Montanaro

Doctoral Dissertation

Politecnico di Torino — Tsinghua University

May, 2026



**Politecnico
di Torino**

ScuDo

Scuola di Dottorato ~ Doctoral School

WHAT YOU ARE, TAKES YOU FAR

Doctoral Dissertation
Doctoral Program in Architecture. History and Project (37th Cycle)

Questioning the Construction Process of ‘Public’ Space in Rural China

Architectural Agency in the Provision of
Community Space for Rural Revitalization: The
Case of 涪山.

Giulia Montanaro

Supervisors

Prof. Michele Bonino, Supervisor

Prof. Song Yehao, Supervisor

Politecnico di Torino
May, 2026

Questioning the Construction Process of ‘Public’ Space in Rural China

Architectural Agency in the Provision of Community
Space for Rural Revitalization: The Case of 沼山.

Dissertation submitted to

Tsinghua University

in partial fulfillment of the requirement

for the degree of

Doctor of Philosophy

in

Architecture

by

Giulia Montanaro

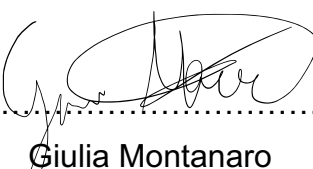
Dissertation Supervisor: Professor SONG Yehao

Co-supervisor: Professor BONINO Michele

May, 2026

This thesis is licensed under a Creative Commons License, Attribution - Noncommercial - NoDerivative Works 4.0 International: see www.creativecommons.org. The text may be reproduced for non-commercial purposes, provided that credit is given to the original author.

I hereby declare that, the contents and organisation of this dissertation constitute my own original work and does not compromise in any way the rights of third parties, including those relating to the security of personal data.



.....

Giulia Montanaro
Turin, May 2026

ABSTRACT

The "Rural Revitalization Strategy" is a key initiative in the ongoing process of rural urbanization in China, aimed at achieving the national goal of village revitalization. This strategy emphasizes key aspects such as land management, agricultural modernization, industrial development, and community building, often grounded in the development of "public" infrastructure and spaces.

Within this framework, this research investigates how architectural design practices intersect with the construction industry in shaping rural "public" spaces, understood as socio-material assemblages where political, economic, and technical dimensions converge.

The study focuses on the transformation of the former clay factory in Yangwenchangwan (杨文昌湾老土厂改造提升设计项目, Yangwenchangwan laotuchang gaizao tisheng sheji xiangmu), located in Zhaoshan Village (沼山村, Zhaoshan cun), Bao'an Town (保安镇, Bao'an zhen), Daye City, Hubei Province. This project is one of the key interventions within the "Zhaoshan Ancient Village Peach Village" (Zhaoshan Gu Cun Tao Xiang - 沼山古村桃乡) 4A Scenic Area Pilot Project, aimed at enhancing the cultural and touristic value of the village and developing new forms of rural public infrastructure. In addition to this in-depth case study, a series of other rural public projects have been explored to provide a broader overview of design practices and to contextualize the specific dynamics observed in Zhaoshan.

Through six months of fieldwork combining ethnographic observation and the analysis of design and construction documents, the research traces the interactions between designers, builders, craftsmen, suppliers, and local institutions. These encounters reveal how design decisions are negotiated within the industrial logics of the building sector, where efficiency, material constraints, and market forces coexist with local practices and social expectations.

Anchored in an ethnographic approach informed by Actor-Network Theory (ANT), the research maps the construction process as a chain of actions, translations, and negotiations. This perspective enables a shift from architectural form to production

practices, highlighting how construction itself becomes a site of mediation between design intentions, industrial technologies, and local ecologies.

Three research questions guide the inquiry:

RQ1. How are rural “public” spaces in contemporary China, specifically in Zhaoshan, co-produced and negotiated through socio-material networks, and how do these networks shape construction processes in practice?

RQ2. How can an ethnographic approach informed by ANT enable the empirical investigation of the co-production and transformation of “public” space, and what do these contexts reveal about the opportunities and limits of theories developed in urban and Western settings?

RQ3. What forms of agency can architects exercise within these rural socio-technical ecologies, particularly in balancing design intentions with the industrial logics of construction and local practices?

Rather than systematizing design solutions, the research aims to reveal the frictions, interdependencies, and pragmatic negotiations that characterize rural construction in contemporary China.

Keywords: Rural Revitalization Strategy; Public Space; Construction Industry; Actor-Network Theory (ANT); Architectural Practice.

摘要

“乡村振兴战略”是中国当前乡村城镇化进程中的一项关键举措，其目标在于实现国家层面的乡村振兴总体目标。该战略强调土地管理、农业现代化、产业发展与社区建设等关键方面，而这些内容往往以“公共”基础设施与空间的建设为支撑。

在这一框架下，本研究探讨了建筑设计实践如何与建筑业相互交织，共同塑造乡村“公共”空间，这些空间被视为政治、经济与技术维度相互交汇的社会—物质组合体。

本研究聚焦于湖北省大冶市保安镇沼山村（沼山村，*Zhaoshan cun*）杨文昌湾（杨文昌湾，*Yangwenchangwan*）的一座旧土厂改造项目，即“杨文昌湾老土厂改造提升设计项目”（*Yangwenchangwan lao tuchang gaizao tisheng sheji xiangmu*，杨文昌湾老土厂改造提升设计项目）。该项目是**“沼山村茅山村景区试点项目”（*Zhaoshan cun Maoshan cun jingqu shidian xiangmu*，沼山村茅山村景区试点项目）**中的重点建设工程，旨在提升村庄的文化与旅游价值，并发展新的乡村公共基础设施形式。除对该案例的深入研究外，本研究还考察了一系列其他乡村公共项目，以提供更广阔的设计实践视角，并为沼山案例中所观察到的具体动态提供背景支撑。

通过为期六个月的田野调查（结合民族志观察与设计及施工文件的分析），本研究梳理了设计师、施工者、工匠、供应商与地方机构之间的互动。这些互动揭示了建筑决策如何在建筑行业的产业逻辑中被不断协商：效率、材料约束与市场力量与地方实践及社会期望并存。

基于以行动者网络理论（Actor-Network Theory, ANT）为指导的民族志方法，本研究将建设过程视为一系列行动、转换与协商的链条。该视角促使研究从建筑形式转向生产实践，揭示了建造过程本身如何成为设计意图、工业技术与地方生态之间的中介场域。

本研究由三项核心问题所引导：

RQ1. 当代中国的乡村“公共”空间（特别是在沼山）是如何通过社会—物质网络被共同生产与协商的？这些网络又如何在实践中塑造建设过程？

RQ2. 以行动者网络理论为框架的民族志方法如何有助于经验性地研究“公共”空间的共同生产与转化？这些情境又揭示了哪些关于主要在西方城市语境中形成的理论的适用性与局限性？

RQ3. 在这些乡村社会—技术生态中，建筑师能够以何种方式发挥能动性，尤其是在平衡设计意图、工业建造逻辑与地方实践之间时？

这项研究并非旨在系统化设计方案，而是致力于揭示当代中国乡村建设中存在的摩擦、相互依存关系以及务实的协商过程。

关键词：乡村振兴战略；公共空间；建筑业；行动者网络理论（Actor-Network Theory (ANT)）；建筑实践。

TABLE OF CONTENTS

ABSTRACT.....	I
摘 要.....	III
TABLE OF CONTENTS.....	V
LIST OF FIGURES	IX
LIST OF TABLES	XXI
LIST OF ACRONYMS	XXIII
PROLOGUE.....	XXV
CHAPTER 1 INTRODUCTION.....	1
1.1 Background of the Study.....	1
1.1.1 Staging the Construction of a Public/Community Building.....	1
1.1.2 The Power of the Process as Ecology.....	3
1.1.3 Where are the Architects?.....	4
1.2 Preliminary Research Questions	5
1.3 Research Methodology and Its Challenges: Unfolding Rural Revitalization Thought Ethnography	7
1.4 Significance of the Study	8
1.5 Research Overview and Structure of the Thesis	10
CHAPTER 2 LITERATURE REVIEW	15
2.1 Framing the Construction Process as Ecology: A Metaphorical Lens to Explore Interconnected Networks	16
2.1.1 Away from Meta-Narratives: Looking to Co-Production.....	18
2.1.2 Performing Agency: Human and Non-Human Actors in a Socio-Technical Perspective	20
2.1.3 No Out-Site.....	23
2.1.4 Emerging themes	26
2.2 Toward Ethnographic Methods for Understanding the Construction Industry's Complexity.....	27
2.2.1 Socio-Material Dimensions of Construction Technology	29
2.2.2 Economies that Shape the Ecologies.....	33
2.2.3 The non-programmatic nature	35
2.2.4 Approaching Ethnographic Research in the Construction Industry and Architecture practice: an inter-disciplinary concern	38
2.2.5 Emerging themes	41
2.3 Construction of Rural “Public” Space in China.....	42
2.3.1 How to look at Provisioning of “Public” Space in Rural China?.....	43
2.3.2 Looking for Architects practice in rural areas	63

TABLE OF CONTENTS

2.3.3 Emerging themes	66
2.4 Summary: From Literature Gaps to Research Questions.....	68
2.4.1 Literature Gaps	68
2.4.2 Expected Contributions	69
2.4.1 Research Questions	74
CHAPTER 3 RESEARCH DESIGN AND METHODOLOGY	75
3.1 A Specific Case Study as an Object of Research: a Methodological Choice.....	76
3.1.1 The Case Study as a Research Method.....	76
3.1.2 Case Selection Rationale: Accessibility, Ordinarity, and Situatedness	77
3.1.3 Epistemological Value of In-Depth Single-Case Analysis	78
3.2 Data Collection: Multi-Sited Fieldwork and Virtual Ethnography	79
3.2.1 Fieldwork in a multi-sited process	80
3.2.2 Methods of Data Collection.....	81
3.2.3 Virtual Ethnography Producing First Documents	86
3.3 Position of the researcher	92
3.4 Limitations of the research in practice	94
3.5 Mapping to Unfold the Process Through Actor–Network Theory.....	96
3.5.1 Network-oriented Ethnographies.....	97
3.5.2 Data and Observations Collected and Organized through an ANT Lens	98
3.5.3 Archive and data analysis	101
3.5.4 Mapping the process.....	106
3.6 Analytical Framework: From Heterogeneous Data to Shared Analytical Operation.....	112
3.7 The Structure of Empirical Chapters.....	120
CHAPTER 4 ZHAOSHAN VILLAGE CASE STUDY	121
4.1 An Introduction to 沼山 Zhaoshan Village	122
4.2 Village Project development: addressing objectives at different scales.....	125
4.3 The research object: <i>Taoli Farm</i> , a “Public” Architecture.....	134
4.3.1 Project Characterization	135
4.3.2 Definition of Functional Requirements, Project Adaptation and Competitive Consultation Documents.....	138
4.3.3 Site-ing work: On-the-ground investigation.....	143
4.3.4 Spatial Design Based on Existing Structural Prototypes.....	146
4.3.5 Construction Through Resource Recycling.....	152
4.3.6 The aspiration to design with social and environmental responsibility.....	161
4.4 Human and Non-Human Resources for a Collective Economy.....	162
4.4.1 Tripartite involvement becomes a vector of investment: government, management company, village committee.....	163
4.4.2 Just a collective land and household rights	170
4.5 The role of designers: Planning Institution, Architect Team and Management Company.....	173
4.5.1 Planning Institution: China Academy of Urban Planning and Design (中国城市规划设计研究院).....	174

TABLE OF CONTENTS

4.5.2 Company Profile and Operational Role: Bannong Life – Wuhan Technology Development Co., Ltd. (半农生活 (武汉) 科技发展有限公司)	177
4.5.3 Architect team: SUP Atelier of THAD	183
4.6 A reportage: The construction process of the new “public” space in Zhaoshan Village. 187	
4.6.1 Demolition Phase: Challenges to Reuse and Unexpected Discoveries on Site.....	188
4.6.2 Construction Documentation: Architects Coordinating Design Teams Through Tendering and Approval.....	191
4.6.3 The Retaining Wall [THING 1] : The color of pre-existences and wasted stones	195
4.6.4 Foundation [THING 2(1)]	213
4.6.5 Concrete structural frame [THING 2(2)]	232
4.6.6 Timber [THING 4]	245
4.6.7 Steel Structure [THING 5]	263
4.6.8 Bricks[THING 6].....	278
CHAPTER 5 SECONDARY CASE STUDIES	299
5.1 Case Studies in Rural Public Space Construction: A Chronological Narrative	302
5.1.1 Maosi Ecological Experimental Primary School - 毛寺生态实验小学 (2004–2005)	302
5.1.2 Macha Village Center - 马岔村民活动中心, 甘肃会宁 (2008–2010)	309
5.1.3 Xihe Cereals and Oils Museum and Village Activity Center - 西河粮油博物馆及村民活动中心 (2013).....	315
5.1.4 Village Lounge of Shangcun - 上村村民会客厅 (2016)	326
5.1.5 Zhujiadian Village Brick Factory Reconstruction - 锦溪祝家甸淀砖厂改造(2017)	333
5.1.6 Dutuan Villagers Public Service Center - 杜潭村村民公共服务中心(2017)	342
5.1.7 Stone Nest Amphitheatre - 石窝剧场 (2019).....	346
5.1.8 Space Improvement Plan for Zaiwan Village - 河南修武县宰湾村空间提升计划 (2021) 349	
5.2 Reconceptualizing the understanding of rural “public” architecture in China.....	353
5.2.1 Tradition and Modernity: Technical Hybridity Beyond Rhetoric	353
5.2.2 From Urban Standards to the Principle of “Enoughness”	354
5.2.3 Distributed Authorship and the Construction Site as Design Space.....	355
5.2.4 Rhetoric Governance, Ownership, and Everyday Use	355
5.2.5 Rhetoric Tourism, Imagination, and the Aesthetics of the Ordinary	356
5.3 Institutional Asymmetries and the Regulation of Rural Construction: countryside as a subaltern construction field	356
CHAPTER 6 RESEARCH CONTRIBUTIONS TO KNOWLEDGE	359
6.1 Empirical Contributions	360
6.1.1 Normative, Safety Standards, and the Shaping of Construction Practices of “public” space 360	
6.1.2 Industrial Supply Chains and Material Agency: Rethinking Rural Construction Practices... 362	
6.2 Methodological Contributions	364
6.2.1 WeChat and Situated Adaptations for Dealing with Research Limitations.....	365
6.2.2 Visualizing Contingency: Process Maps, Cosmograms, and the Challenge of Zhaoshan project Representation.....	367
6.2.3 Documents, Diagrams, and the Chain of Substitutions.....	370
6.3 Practical Contributions.....	371
6.3.1 Creating Spaces of Indeterminacy.....	371
6.3.2 Tensions and Hierarchies.....	373
6.4 Theoretical Contributions.....	374
6.4.1 Rigid and Fluid Technologies: Extending ANT through the Case of Zhaoshan	374
6.4.2 Non-Human Agency: Materials, Tools, and Agentive Environments	377

TABLE OF CONTENTS

6.5 Further Reflections: On the Notion and Use of “Public” in Rural China	381
6.5.1 The Redefinition of Spaces and the Sense of “Publicness”	382
6.5.2 Architecture of Public Works and the Welfare State	385
6.5.3 A Global Perspective on Public, the Commons and Common	387
6.5.4 The evolution of 公共(“public/collective”) space and its meaning in rural China.	393
6.5.5 Architecture's construction of the concept of the "public": a lexical inconsistency	401
CHAPTER 7 CONCLUSIONS AND RESEARCH PERSPECTIVES	405
7.1 Research Overview	405
7.2 What the use of ANT has enabled	408
7.3 Future perspectives: Replicability, impact, and post-colonial debates.....	411
7.3.1 Replicability and transferability of the analytical approach.....	411
7.3.2 Impact on professional practice and the construction industry	412
7.3.3 Public space as an open research question on architectural production	413
7.4 Recommendations for future research	413
7.5 Concluding remarks	415
REFERENCES	417
APPENDIX....	441
ACKNOWLEDGEMENTS.....	443