

Beyond Materiality

Adaptive Reuse as a Situated and Ethical Practice in the Global South

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Abstract

Contemporary society faces a critical crossroads concerning its built and cultural legacy. In a global context shaped by climate emergency, resource scarcity, and the progressive loss of local identities, adaptive reuse emerges not only as a pragmatic strategy for sustainability but also as an ethical imperative and a catalyst for architectural innovation. This paper explores how this approach—understood in an expanded sense—reconfigures both material and cognitive heritage in a situated and collective dimension. Through a qualitative methodology applied to three case studies that integrate vernacular practices and community participation in Global South settings—the revitalization of seven Tulou in Fujian (China); the religious and secular complex Hikma in Dandaji (Niger); and the Chaki Wasi Crafts Center in Zumbahua (Ecuador)—this research reveals innovative, place-based strategies that transcend materiality and act as invisible agents for indigenous wisdom, traditional techniques, and communal ways of inhabiting the territory. Each project, from its geographical location and cultural background, activates deeper social, symbolic, and intangible reuse processes. These range from heritage acupuncture that reinforces the community logic of Chinese fortified dwellings as new cultural nodes; through the intercultural mediation of a sub-Saharan mosque that hybridizes vernacular methods with contemporary programs to dismantle spatial and religious hierarchies; to the conceptual recovery of Andean craftsmanship by means of an architectural reinterpretation of *quincha* and the collective endeavor of *minga*, fostering local economies and safeguarding women's intergenerational knowledge. The study thus proposes a critical expansion of the concept of adaptive reuse from a decolonial and gender perspective, highlighting resilient practices that—without relying on monumentality or spectacle—restore rooted and significant connections, traditions, and memories within their communities.

Keywords: Situated Adaptive Reuse, Vernacular Architecture, Critical Heritage

Introduction

Architecture is undergoing a crisis of meaning that compels a reconsideration of its role in shaping inhabited territory and in the responsible management of resources. The climate emergency, loss of biodiversity, social inequality, and cultural homogenization challenge the logic of unlimited production that has guided architectural modernity (Latour 2018). In this context, adaptive reuse emerges as one of the most consistent approaches to addressing these issues. Firstly, for its ability to reduce consumption and extend the life cycle of buildings, as it was traditionally understood (Douglas 2006); also, because it has expanded

to incorporate more critical interpretations that encompass controlled urban development, social and cultural dimensions, and the transformative role of memory (Stone 2023). From this broadened perspective, to reuse is not merely to preserve matter, but to reactivate relationships, knowledge, and ways of dwelling that give significance to space. This expansion is particularly relevant in the territories of the Global South, where colonial, extractive, and unequal dynamics have shaped processes of modernization. In these locations, interventions on the existing respond not only to criteria of efficiency but are also intertwined with resistance to external models and with the need to restore displaced collective histories and experiences. In this sense, the present study aims to analyze how specific contemporary architectures developed in these contexts reformulate the concept of adaptive reuse from a situated, ethical, and decolonial standpoint.

Theoretical Framework: Toward a Situated, Critical, and Relational Reading

Adaptive reuse has evolved from an instrumental interpretation—linked to heritage management and energy efficiency—toward a more complex consideration that conceives it as a tool for cultural renewal. Its initial formulation, which was pragmatic in nature, understood the conversion of buildings as a response to functional obsolescence and as a means to optimize resources (Douglas 2006; Bullen & Love 2011). Nevertheless, this functionalist vision gradually became associated with the dynamics of urban regeneration and territorial sustainability strategies, incorporating environmental and economic criteria into adaptive urban planning (Baum & Christiaanse 2012; Yung & Chan 2012). In parallel, an interpretative reading of the term emerged, recognizing that adaptation entails more than extending the physical lifespan of constructions (Vafaei et al. 2023) but also sustaining social relationships, activating memories, and preserving the identity of places. This conceptual evolution has been reinforced by viewpoints that envision architecture as an open and temporal practice, in constant transformation (Ingold 2013), alongside proposals that embrace uncertainty and loss as integral parts of heritage management, incorporating the creative potential of the built legacy (DeSilvey & Harrison 2020). These contributions converge in the work of Sally Stone (2023), who synthesizes this shift by conceiving reuse as a form of cultural and design ‘translation,’ in which the existing building becomes an active part of the design process. In this regard, the notion ceases to be simply a technique of intervention and becomes a symbolic device capable of articulating environmental sustainability, social justice, and diversity.

The expansion acquires particular significance when viewed from a decolonial perspective. Authors such as Quijano (2000), Mignolo (2011), and Escobar (2018) have shown how conservation and restoration approaches originating in Europe were grounded in a universalist vision that homogenized ways of inhabiting and relegated local traditions to the realm of folklore. The coloniality of power (Quijano 2000) reveals that these hierarchies persist today in the form of racial, ideological, and economic inequalities. In response to this, decolonial thought, along with Mignolo’s (2011) border epistemologies and Escobar’s (2018) relational ontology of design, advocates for recognizing local communities as producers of knowledge rather than simple recipients of external models. From this standpoint, adaptive reuse can be understood as a mode of re-existence, as it not only preserves but also repairs and reclaims wisdom that has been subordinated by modernity. The feminist contribution also introduces the ethics of care as a central category for

rethinking architecture. Within this same line of thought, authors such as Tronto (1993), Federici (2020), and Puig de la Bellacasa (2017) have shown that the tasks of maintaining, repairing, and sustaining have been systematically rendered invisible. Bringing this ethic into the architectural field implies shifting attention away from the authorial gesture toward practices of continuity. To reuse, therefore, is not to perpetuate a form but to extend a relationship. This reorientation also highlights the role of women and local communities as bearers of knowledge, thereby placing interdependence at the center of the discipline. Concurrently, the ecological turn in the humanities (Morton 2013; Ingold 2021) completes this structure by reframing sustainability from simple resource preservation toward the recognition of living assemblages that sustain dwelling. Latour (2018) argues that the climate crisis has dismantled the idea of unlimited progress, calling for a 'landing' in the local, and recognizing that we live within networks of interdependence between humans and non-humans. Bennett (2010) reminds us that materials are not inert but vibrant actors, and Ingold (2021) conceives every constructive practice as a form of correspondence with the flows of matter. From this perspective, reuse is no longer a purely rational operation. It becomes a radical ecological act that cares for the territory's metabolism, fostering sustainability that is simultaneously environmental, cultural, and affective.

Critical and Comparative Methodology

This article employs a qualitative and interpretive methodology (Denzin & Lincoln 2011) of a comparative nature, aiming to challenge the hegemonic conception of the term 'adaptive reuse' and propose a critical reformulation grounded in the situated experiences of the Global South. In contrast to more technical interpretations of the concept, this research assumes that architecture cannot be treated as an isolated object, but rather as a network of discourses, practices, and affects. The purpose is not to evaluate the formal success of particular works, but to interrogate the epistemological boundaries of the notion of reuse and demonstrate how, within specific cultural and political contexts, it acquires ethical, social, and cognitive dimensions that broaden the traditional frameworks of the discipline (Stone 2023). The analysis follows the logic of multiple case study research as described by Yin (2014), seeking to understand complex phenomena in their real-life settings rather than produce statistical generalizations. The principle of situated knowledge (Haraway 2013) is key, as examining architectural practices from the global peripheries, while based in a European institution, requires a reflexive stance that confronts epistemic asymmetries inherited from colonialism and avoids extractive readings of local experiences. Hence, the research is conceived as an exercise in listening and translation, framing reuse as an act of spatial justice that sustains the territorial continuity of inhabited environments.

The composition of the study corpus was based on a preselection of contemporary projects that address architectural reuse from a situated perspective. Priority was given to those with verifiable documentation—such as interviews, publications, and audiovisual material—and those located in emerging or postcolonial contexts—rural China, the Nigerien Sahel, and the Ecuadorian Andes—in order to capture diverse environmental and sociocultural conditions. Likewise, a heterogeneous typological representation was sought—communal complexes, religious facilities, productive centers—while giving particular attention to two transversal dimensions: on the one hand, the role of women in design and construction processes, conceived not only as participation but also as active transformation of power

structures and the collective meaning of architectural practice; and on the other, the framing of reuse as a catalyst of care for the territory.

According to these criteria, three paradigmatic cases were selected: the Tulou rehabilitated by DnA_Design and Architecture in Fujian (China), the Hikma Community Complex by Atelier Masōmī and Studio Chahar in Dandaji (Niger), and the Chaki Wasi Crafts Center developed by La Cabina de la Curiosidad in collaboration with the Indigenous community of Shalalá (Ecuador). Far from seeking quantitative representativeness, these examples constitute a comparative framework that reveals how reuse operates simultaneously on material, symbolic, and cognitive levels, thus opening a fertile field for rethinking contemporary ways of living, learning, and caring through what already exists.

Case Studies: Three Shifts in Adaptive Reuse

In the case of the Tulou of Fujian (Fig. 1)—large, fortified dwellings made of rammed earth, built by Hakka communities from the 12th to 20th centuries—Xu Tiantian proposes an innovative intervention that goes beyond heritage conservation to address an urgent social issue, namely the gradual decline of function and shared identity in the Chinese countryside.

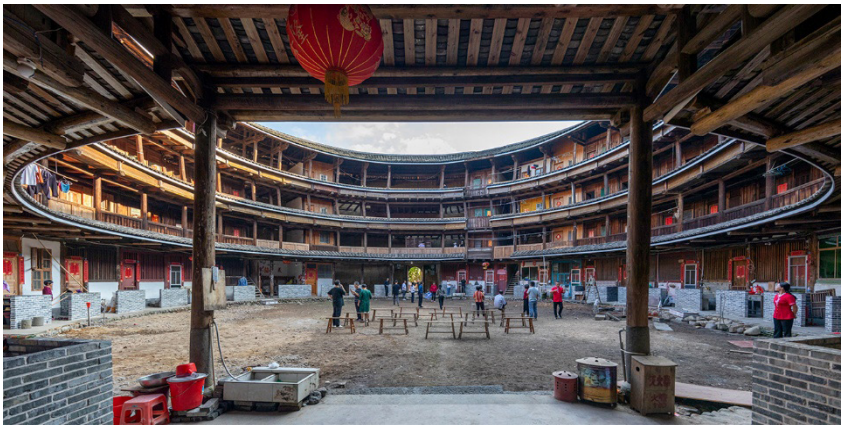


Fig. 1. Cuimei Tulou in Fujian (Wang Ziling, Courtesy of DnA_Design and Architecture, 2023)

In response to this situation, the project aims to revitalize these structures through cultural programs, public spaces, and community centers, thereby reactivating both the local economy and a sense of belonging. Rather than restoring individual buildings, the project treats the Tulou as social infrastructures that embody collective memory and communal organization. The process carefully combines local craftsmanship and traditional rammed-earth walls and timber techniques with contemporary elements compatible with the vernacular system, preserving the ensemble's authenticity while expanding its potential uses. The intervention's significance lies in the shift of emphasis, as the operation is conceived not exclusively as an exemplary restoration, but as heritage acupuncture (Xu 2024), based on small-scale, low-intensity actions—such as new walkways, courtyards, or artifacts—that reactivate large-scale social dynamics. In this way, the Tulou are reinterpreted not as isolated

cultural objects, but as living structures that articulate inherited traditions into new modes of social interaction. Their reuse generates hybrid spaces of learning, encounter, and artistic production, where architecture serves as a mediator between past and present. In this sense, sustainability extends not only to energy indicators but also to the renewed ability of these buildings to sustain social bonds, reinforce identity, and revive rural economies.



Fig. 2. Hikma Community Complex (James Wang, Courtesy of Mariam Issoufou Architects, 2018)

In the village of Dandaji, Niger, the initial situation was different, as an old adobe mosque, historically associated with community life, had ceased to meet the shared needs of the inhabitants and had progressively become a space dominated by men (Issoufou 2024). Rather than demolishing it or preserving it as a relic of the past, Mariam Issoufou Kamara and Yasaman Esmaili reformulate its meaning by transforming the temple into a library, while constructing a new contemporary mosque to assume the religious function (Fig. 2). Reuse thus takes place through a dual movement that redefines the boundaries between tradition and innovation, reframing what already exists and expanding its meaning in order to create a new framework for spiritual and social life. This renewal is also expressed through materiality, as the new building reinterprets the typology of the traditional Hausa mosque by using compressed earth blocks (CEB) instead of conventional adobe. This choice lends the Hikma Community Complex a contemporary dimension without disrupting continuity with Sahelian constructive logics. At the same time, the redistribution of uses frames heritage as a flexible, negotiable space—one that can support new forms of citizenship. As a result, the project equates the spheres of knowledge and faith, dismantling long-standing hierarchies between the sacred and the secular, while expanding the concept of religious architecture toward civic, educational, and social uses. Moreover, in coherence with this idea, the participation of women and local artisans reinforces this interpretation, as reuse is no longer limited to the building itself, but redistributes the capacity to produce and inhabit space, turning the complex into a representative example of adaptive reuse that is at once material, functional, and symbolic.

The Ecuadorian case pushes the conventional understanding of reuse even further, as it does not begin with an existing structure, but with the need to revitalize know-how and

constructive traditions that have been relegated and devalued by modernization and colonial paradigms. In the Chaki Wasi Crafts Center initiative (Fig. 3), developed by La Cabina de la Curiosidad—led by Marie Combette and Daniel Moreno Flores—in close collaboration with the community of Shalalá, architecture itself is conceived as a pedagogical and cultural instrument. The construction is oriented toward reactivating the technique of *quincha*—a vernacular method of wooden framework filled with earth and vegetal fibers—and the collective work of *minga*—an ancestral practice of communal cooperation based on solidarity and shared effort. In this sense, the architectural intervention is defined as an embodied representation of Andean culture and, at the same time, as an educational platform for exchange. This dual dimension can be read as the transmission of a way of dwelling deeply connected to the landscape—made through river-stone foundations, eucalyptus wood structure tied with *cabuya* fiber, and straw bales (Combette and Moreno Flores 2024)—materializing the continuity between territory, technique, and memory.



Fig. 3. Chaki Wasi Crafts Center (JAG Studio, Courtesy of La Cabina de la Curiosidad, 2024)

Thus, rather than preserving a form, the project rebuilds an intergenerational thread of knowledge, rituals, and customs. In doing so, architecture becomes a lived space for learning and autonomy, supporting the empowerment of twenty-four families involved in artisanal production and strengthening a model of development grounded in reciprocity and care.

Discussion

The analysis of these projects reveals a substantial shift in how adaptive reuse is understood, as intervention is conceived as a social and ethical act in which community ties, local intelligence, and collective memory are as decisive as the built matter itself.

The case of the Tulou demonstrates how reuse can function as a form of cultural continuity. Here, the proposal not only updates the building but also maintains the conditions that sustain its communal role and capacity to generate social cohesion; the Hikma Community Complex, in turn, adds a symbolic and political dimension, as the transformation reinterprets an existing resource while redistributing the meanings of shared space, articulating the sacred function with secular use; finally, the Chaki Wasi Crafts Center introduces an

additional layer to the discussion, linked to marginalized traditions. In this project, reuse is redefined as the reactivation of ancestral knowledge rather than as a physical intervention on an architectural object.

This research concludes with the formulation of a relational theory of adaptive reuse, arguing that its value lies not in formal preservation but in the ability of architectural practice to maintain material, symbolic, and cognitive continuities. Together, the three cases illustrate a range of mediations that show how context-sensitive architectures can serve as tools for care, memory, and territorial renewal. From this perspective, reuse functions as a cultural and political instrument that challenges the extractive logic of modernization, confronting the gradual loss of local identity while promoting alternative forms of autonomy and spatial justice across the Global South. Therefore, the strength of this study comes from its capacity to produce architectural knowledge by demonstrating, from a contextual viewpoint, what defines—and also what limits—the possibilities of adaptive reuse in current practice.

Conclusions

The theoretical and analytical trajectory developed in this study demonstrates that the conventional notion of adaptive reuse—shaped by the normative frameworks of the Global North—offers only a partial understanding of the diverse realities emerging in Southern contexts. The analysis highlights that, from a situated position, reuse transcends technical parameters to become a cultural, ethical, and cognitive practice. Each intervention articulates a distinct mode of engagement with the existing, namely in Fujian through the renewal of a living typology, in Dandaji through the redistribution of symbolic and spatial value, and in Zumbahua through the reactivation of displaced forms of knowledge.

In conclusion, adaptive reuse stands as a gesture of reappropriation and material hope—refusing waste, oblivion, and homogenization while affirming alternative ways of enduring. Beyond materiality, these practices extend the lifespan of architectural heritage in order to sustain the relationships that weave together generations, wisdoms, bodies, and territories.

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Bibliography

- Baum, Martina, and Kees Christiaanse, eds. *City as Loft: Adaptive Reuse as a Resource for Sustainable Urban Development*. Zurich: gta Verlag, 2012.
- Bennett, Jane. *Vibrant Matter: A Political Ecology of Things*. Durham; London: Duke University Press, 2010.
- Bullen, Peter, and Peter Love. "Factors Influencing the Adaptive Re-Use of Buildings." *Journal of Engineering, Design and Technology*, 9, 32–46, 2011.
- Combette, Marie, and Daniel Moreno Flores. "Chaki Wasi. Centro de artesanías de la comunidad de Shalalá, Ecuador". *Arquitextos* 39, 44–51, 2024.
- Denzin, Norman K., and Yvonna S. Lincoln. *The SAGE Handbook of Qualitative Research*. Thousand Oaks: SAGE, 2011.

- DeSilvey, Caitlin, and Rodney Harrison. "Anticipating Loss: Rethinking Endangerment in Heritage Futures". *International Journal of Heritage Studies* 26, 1–7, 2020.
- Douglas, James. *Building Adaptation*. Oxford: Butterworth-Heinemann, 2006.
- Escobar, Arturo. *Designs for the Pluriverse: Radical Interdependence, Autonomy and the Making of Worlds*. Durham: Duke University Press, 2018.
- Federici, Silvia. *Revolution at Point Zero: Housework, Reproduction, and Feminist Struggle*. Oakland: PM Press, 2020.
- Haraway, Donna. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective". In *Women, Science, and Technology*, edited by Mary Wyer et al., 455–472. New York: Routledge, 2013.
- Ingold, Tim. *The Perception of the Environment: Essays on Livelibood, Dwelling and Skill*. London: Routledge, 2021.
- Ingold, Tim. *Making, Anthropology, Archaeology, Art, and Architecture*. London: Routledge, 2013.
- Issoufou, Mariam. 2024. "Hikma Community Complex, Niger by Mariam Issoufou Architects & Studio Chahar | Words with Winners". Accessed October 6, 2025. <https://awards.holcimfoundation.org/past-winners/hikma-complex>
- Latour, Bruno. *Down to Earth: Politics in the New Climatic Regime*. Cambridge: Polity Press, 2018.
- Mignolo, Walter D. *The Darker Side of Western Modernity: Global Futures, Decolonial Options*. Durham: Duke University Press, 2011.
- Morton, Timothy. *Hyperobjects: Philosophy and Ecology after the End of the World*. Minneapolis: University of Minnesota Press, 2013.
- Puig de la Bellacasa, María. *Matters of Care: Speculative Ethics in More than Human Worlds*. Minneapolis: University of Minnesota Press, 2017.
- Quijano, Aníbal. *Colonialidad del poder, eurocentrismo y América Latina*. Buenos Aires: CLACSO, 2000.
- Stone, Sally. "Notes towards a Definition of Adaptive Reuse". *Architecture* 3, 137–156, 2023.
- Tronto, Joan C. *Moral Boundaries: A Political Argument for an Ethic of Care*. New York: Routledge, 1993.
- Vafaei, Fatemeh, Hilde Remøy, and Vincent Gruis. "Adaptive Reuse of Heritage Buildings: A Systematic Literature Review of Success Factors". *Habitat International* 142, 102926, 2023.
- Xu, Tianian. 2024. "Holcim Award Winner Xu Tianian Discusses the Impact of Adaptive Reuse". Accessed September 11, 2025. <https://www.archdaily.com/1017970/restoring-a-symbol-of-collective-memory-holcim-award-winner-xu-tianian-discusses-the-impact-of-adaptive-reuse>
- Yin, Robert K. *Case Study Research: Design and Methods*. Thousand Oaks: SAGE, 2014.
- Yung, Esther H. K., and Edwin H. W. Chan. "Implementation Challenges to the Adaptive Reuse of Heritage Buildings: Towards the Goals of Sustainable, Low-Carbon Cities". *Habitat International* 36, 352–361, 2012.