Dimensions of Architectural Knowledge, 2024-08
https://doi.org/10.14361/dak-2024-0815

Repair as Practice: Expanding Architectural Approaches to Climate Justice in Southern Africa

Jhono Bennett

Abstract: The built environment contributes over 40% of global carbon emissions. Yet, architectural knowledge and practice remain shaped by Western, extractive, and technocratic paradigms that fuelled this crisis and still conceal their colonial entanglements while perpetuating systemic inequality. Towards which, this paper advances the concept of *reparative urbanism* as a spatial design approach that centers justice, care, and relational practice in the face of the growing climate crisis. Drawing on my position as a South African practitioner-scholar and two case studies – Liz Ogbu's healing-centered design practice in the United States and 1to1 – Agency of Engagement's grassroots work in Johannesburg – I explore how a reparative approach offers a means to operate as both material and relational practice.

Rather than an endpoint, repair is presented as a sustained architectural process: creative, imperfect, and politically engaged. It speaks to everyday acts of maintenance in informal settlements, long-term community partnerships in contexts of spatial injustice, and design processes that acknowledge systemic harm while cultivating futures of dignity and belonging. Through a concise analysis of two practices, the paper explores how repair has the potential to disrupts cycle of disposability embedded in mainstream planning and instead enables adaptive infrastructures, multi-authorship, and collective governance.

The paper proposes five interconnected practice principles for reparative design: acknowledging histories of spatial harm; co-authoring knowledge through long-term partnerships; embedding care and deliberation in design; activating local infrastructures through community-led planning; and sustaining networks of solidarity across geographies. In doing so, it argues that architecture and urbanism must move beyond sustainability metrics to embrace repair as climate justice – redefining architectural agency not by what it produces, but by how it sustains the relationships, systems, and communities it touches.

Keywords: Repair; Climate Justice; Southern Africa; Spatial Practice; Reparative Urbanisms.

Corresponding author: Jhono Bennett (University of Cape Town); jhono.bennett@ucl.ac.uk; https://orcid.org/0000-0002-3901-7040 Open Access. © 2025 Jhono Bennett published by transcript Verlag. This work is licensed under the Creative Commons Attribution 4.0 (BY) license.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

Introduction

Since 1751, the effective beginning of the industrial revolution, the world has emitted over 1.5 trillion tonnes of CO_2, with nearly half of these emissions originating from the United States and the European Union (Institute for European Environmental Policy, 2020). The built environment sector alone accounts for over 40 percent of global carbon emissions, with 30 percent attributed to building operations (United Nations Environment 2024; WEF 2022). At the same time, rising global inequalities exacerbate spatial injustices, leading some urban scholars to frame these disparities as a form of »climate apartheid« (Brisman et al. 2018).

As a South African architect and researcher working at the intersection of practice and academia, my perspective on these global crises is deeply informed by the specific urban realities of post-apartheid cities. Having co-founded 1to1 – Agency of Engagement[1] in Johannesburg, a design-based social enterprise that collaborates with grassroots urban movements on issues of spatial justice, I have spent much of the past decade navigating the tension between formal architectural practice and the lived experiences of communities facing systemic precarity. This has profoundly shaped my reading of climate injustice: For me, the climate crisis is inseparable from histories of segregation, dispossession, and and coloniality, and it is within this nexus that reparative approaches to spatial practice emerge as critical. Africa, for instance, contributes less than four percent of global carbon emissions, yet faces climate policies that restrict its industrialization and technological development (UNEP 2021). Meanwhile, European nations, particularly the UK, amassed wealth through colonial resource extraction, and these exploitative dynamics persist in modern waste disposal and industrial practices. For example, an estimated 64 percent of the EU's electronic waste – equivalent to 2.5 billion smartphones annually – is exported to African countries like Ghana and Nigeria, where it is processed informally under hazardous conditions (Basel Action Network 2022). Agbogbloshie, Ghana, one of the world's largest e-waste landfills, exemplifies the consequences of

1 1to1–Agency of Engagement is a Johannesburg-based, non-profit, design-led practice founded in 2010 to support community organizations, social movements, and residents in co-design processes that address spatial inequality. For further information, consult: https://1to1.org.za, accessed October 5, 2025.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

these environmental injustices, exposing local residents to toxic pollutants in unregulated settings.

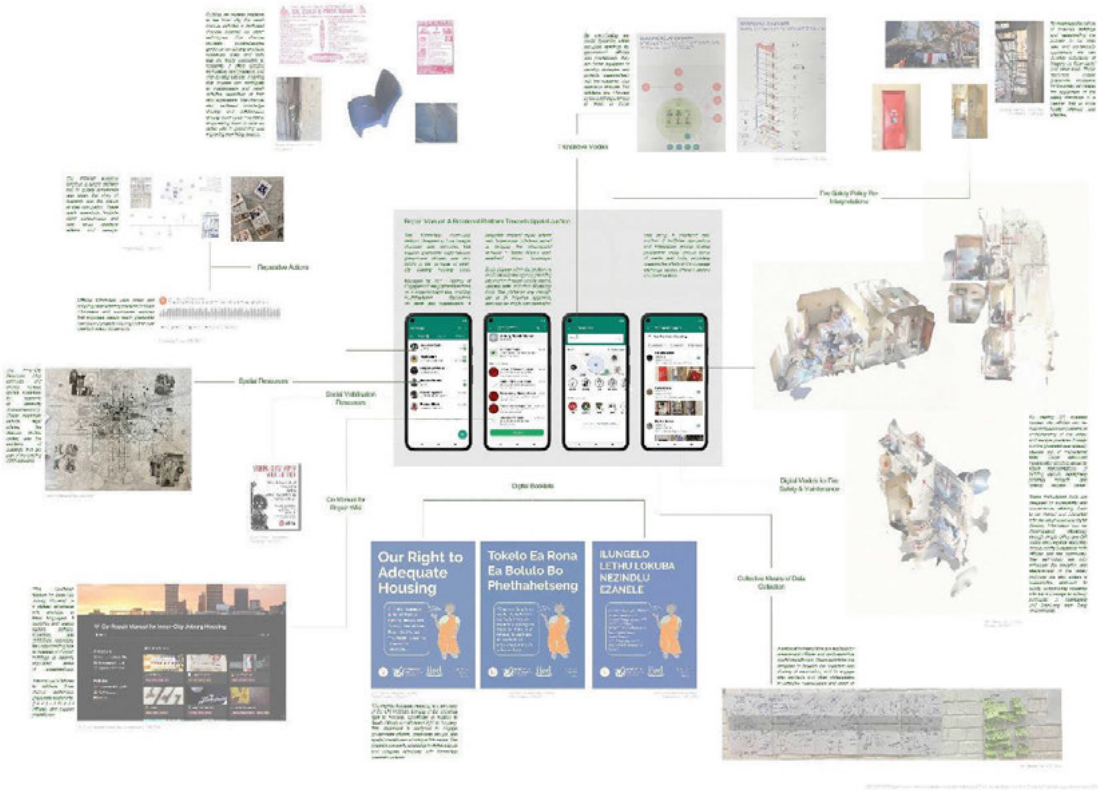
These double standards highlight the broader structural inequalities embedded in climate discourse, wherein formerly colonized regions bear the greatest burdens yet wield minimal influence over global policy frameworks (Hickel 2020). Africa's minimal per capita carbon emissions – just one tonne annually compared to Europe's 7.1 tonnes (Friedlingstein et al. 2022) – stand in stark contrast to the continent's severe climate disruptions, including food insecurity, water shortages, and economic instability. As African cities undergo rapid urbanization under the compounded pressures of climate change and historical exploitation, they continue to grapple with entrenched environmental and socio-economic inequities.

Urbanization patterns beyond the Western world further underscore these shifting global dynamics. Rapid urban growth in regions such as Africa and Asia is not only surpassing that of Europe and North America but is also unfolding under unprecedented socio-economic conditions. Towards which, Africa's median age is approximately 19.7 years, making it the youngest continent demographically (Median Age in Africa 2000–2030 2020; Paice 2021). Meanwhile, between 2011 and 2013, China used more concrete than the United States did throughout the entire 20th century – highlighting a dramatic realignment in global construction trends (Chen 2014; Swanson 2015). These patterns reflect deeper global asymmetries, often along structural inequalities that shape how built environments are produced and inhabited on a global scale. In this context, spatial practices must be critically re-evaluated, particularly those that claim to address climate and development challenges.

Across the built environment there is a pressing need for climate-resilient, context-sensitive design approaches that enable architects and planners to meaningfully engage with uneven development and entrenched disparities (Raworth 2017). Yet the values underpinning dominant architectural knowledge systems remain overwhelmingly Western and Eurocentric, often failing to account for the legacies of extraction, economic exploitation, and political domination that continue to structure contemporary global inequities (Mbembe 2017). Beyond questions of material use and energy efficiency – both central to the climate crisis – architectural education and practice must also contend with foundational issues of social and spatial justice.

The dominance of Western/Eurocentric knowledge systems has increasingly been challenged by calls for decolonization in architectural curricula, aligning with Aníbal Quijano's theorization of coloniality of power, which

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY



1.
Repair Manual: Reparative Spatial Practices, by author, 2024.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

describes how colonial structures have historically – and continue to – shape knowledge production and value systems (Quijano 2000). Until these epistemological hierarchies are addressed, the knowledge systems that frame how we even understand crises like climate change will continue to perpetuate exclusionary frameworks that marginalize extra-Western practices and spatial knowledge. Scholars such as Walter Mignolo and Achille Mbembe have further demonstrated how dominant paradigms reinforce educational inequities and dismiss indigenous and alternative knowledge systems (Mignolo 2011; Mbembe 2017). Furthermore, such models often fail to reflect the contemporary realities of global architectural practice, which increasingly involve iterative, collaborative design and co-production processes that better represent how built environments are shaped in practice (Till 2009).

This paper contributes to the growing discourse on reparative urbanisms by arguing that reparative spatial design (fig. 1) – enacted through architectural processes not limited to, but inclusive of, architects – offers a meaningful response to the intensifying conditions of the looming climate apartheid (Alston, 2019). It proposes that reparative design operates across multiple scales, from the interpersonal to the global, by integrating multi-authorship, systemic intervention, and relational practices that challenge exclusionary forms of urbanism. Drawing from settler colonial contexts and architectural practices – specifically the work of Liz Ogbu's Studio O and 1to1 – Agency of Engagement, this research explores how reparative approaches developed in places like South Africa can inform a broader, globally relevant framework for spatial practice. Considering the escalating climate crisis and its entanglement with colonial legacies, the paper calls for urgent shifts toward spatial justice-oriented models of design and governance, and offers a conceptual framework for an emergent practice principles through the idea of reparative architectural practice.

The Missing 'e' of Climate Justice

With cities across the globe experiencing rapid growth, adopting a more grounded perspective on social and spatial justice has become increasingly critical to addressing decarbonization efforts. This involves protecting vulnerable populations from the adverse effects of climate change, safeguarding them from its disruptive impacts, and facilitating the transition toward an equitable post-carbon society. In South Africa, this challenge is particularly

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

acute: Rapid urbanization collides with the country's deeply unequal spatial legacy, where informal settlements on floodplains or in fire-prone areas disproportionately bear the brunt of climate hazards. Rising sea levels threaten coastal communities in Cape Town's low-lying townships, while heat waves and increased flooding compound existing infrastructural deficits in Johannesburg and Durban. These overlapping pressures highlight how climate emergency and urbanization are inseparably entwined in contexts shaped by apartheid-era land use and persistent socio-economic inequality.

Towards this, Climate Urbanism offers a crucial framing for how architects, urbanists, and planners can situate their role addressing the global climate crisis, positioning cities as central actors in this unfolding challenge. As articulated by Long and Rice (2019), climate urbanism underscores the role of cities as vital sites for climate action, emphasizing the protection of infrastructures, services, and economies from climate-related hazards. For example, investments in stormwater systems in Durban's eThekwini municipality or the City of Cape Town's water resilience strategy demonstrate how urban governments mobilize adaptation measures. Yet these same strategies often reproduce inequality by privileging well-resourced neighborhoods over marginalized ones.

This foundational perspective requires a more nuanced and located understanding, particularly when its underlying assumptions and the political narratives driving its adoption are critically examined. Scholars in the field of climate urbanism have identified that mitigation and adaptation efforts often produce distributional impacts that exacerbate existing social and economic inequalities (Hughes/Hoffmann 2020). For instance, flood-buffering infrastructure in Cape Town's wealthy suburbs frequently receives more investment than informal settlements along rivers, where residents face recurrent flooding without adequate protection. Such examples illustrate that climate adaptation can reinforce, rather than alleviate, urban divides. For this reason, architects, planners, and urbanists must go beyond one-size-fits-all approaches. Instead, they must develop responses that are adaptive, inclusive, and transformative, acknowledging the distinct challenges and opportunities presented by different urban areas in different parts of the world (Watson, 2014; Bhan, 2019). Scholars increasingly argue for including marginalized communities such as shack-dwellers' movements (e.g., Abahlali baseMjondolo in South Africa or Shack/Slum Dwellers International globally) in decision-making around adaptation. Yet Jonathan Silver, a geographer working on African urban infrastructures, critiques

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

climate justice efforts for privileging top-down adaptation strategies over grassroots practices already at work in marginalized neighborhoods (Silver 2023). For example, while state-led relocation schemes often fail, community-driven upgrading initiatives – like the participatory flood-mapping in Cape Town's Khayelitsha or the co-produced maintenance of drainage systems in Dar es Salaam – offer more context-sensitive, resilient solutions.

In this light, the notion of »climate colonialism« has been suggested to frame the current era as a continuation of long-standing environmental injustices (Sultana 2022). The climate crisis emerges here as a manifestation of deeply embedded global inequalities, where technocratic sustainability frameworks obscure the legacies of colonialism, extractivism, and uneven industrialization. For example, large-scale renewable energy investments in South Africa's Karoo region often exclude local communities from decision-making, echoing extractive land-use patterns while being promoted as »green« solutions. This tendency to sideline politics in favor of technical fixes is evident across many less developed contexts. In Mozambique, for instance, post-cyclone reconstruction prioritized foreign investment projects while sidelining local rebuilding practices – reinforcing dependency and marginalization. Such cases underscore that adaptation strategies must not only address immediate hazards but also confront historical injustices.

These concerns are framed within the broader scholarship on »climate apartheid,« which describes the global phenomenon of inequality and segregation intensified by climate change (Long/Rice 2019). While recently coined, the concept is deeply rooted in historical legacies of exploitation, racism, and the unequal distribution of resources and risks associated with climate hazards (de Shalit 2011). Climate apartheid highlights how ongoing systems of oppression – namely settler colonialism, racial capitalism, and neoliberal governance – magnify the crisis and make injustice visible in urban form. In South Africa, apartheid's legacy of spatial segregation means that low-income communities remain concentrated in peripheral or risk-prone areas. Housing policies continue to reinforce these patterns by reproducing mono-functional settlements on cheap, vulnerable land rather than integrating communities into safer, better-serviced urban fabrics.

This process of dispossession and systemic violence is not confined to the past but continues to shape present-day realities, particularly in the management of disaster risk and housing provision. For example, informal settlement residents in Cape Town's Philippi or Johannesburg's inner city face repeated evictions in the name of »risk mitigation,« even though such

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

measures rarely address the root causes of vulnerability. Climate change magnifies these injustices, rendering such communities more expendable in the face of environmental hazards (Tuana 2019).

To address these injustices, the concept of »climate justice« is offered as a supportive frame for action toward fairness and equity in the distribution of both the benefits and burdens of climate change (Jasrotia 2016; Macquarie 2023). For spatial practitioners, this means embedding equity into design and planning decisions: Ensuring, for instance, that flood infrastructure is co-designed with informal settlement residents; supporting community-managed water storage projects in drought-prone areas; or creating participatory planning processes that redistribute state resources toward the most vulnerable. These actions highlight the central role of architects and planners not as neutral problem-solvers, but as actors accountable to histories of harm and capable of shaping reparative futures. Climate justice thus insists that those most affected by climate change must be at the center of decision-making, and that design practice itself must evolve into a tool of redistribution and solidarity.

Repair as Architectural Practice

Humanities scholar Elizabeth Spelman's characterization of repair as »the creative destruction of brokenness« provides a foundational insight, supporting a view of repair that extends beyond the act of fixing an object toward a dynamic process of urban, architectural, and social renewal (Spelman 2003). Spelman highlights the creativity inherent in repair, illustrating that the process transcends mere reconstruction. Destruction becomes a catalyst for transformation, enabling growth and new possibilities.

In my own work, I work with repair as a sustained spatial practice of care that works through systemic brokenness to reconfigure relationships, infrastructures, and environments in ways that address both material and social inequities. In this sense, repair is not simply about restoring a building or a city to a former state, but about actively engaging with histories of harm and the lived realities of those excluded from conventional development. Rather than aiming for seamless restoration, this approach challenges conventional ideas of repair by valuing the layered conditions as expressions of care and history. It advances an iterative, reparative practice that simultaneously interrogates how reparation functions as a mode of spatial justice.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

An example of which I offer is the iterative maintenance of Johannesburg's Slovo Hall (fig. 2). These traces narrate layered histories of survival, collaboration, and endurance rather than erasing them. Extending this understanding, repair becomes more than a material act – it becomes a critical lens for addressing broader socio-spatial challenges. For spatially marginalized groups, repair is relational: It is about sustaining connections to place, rebuilding networks of solidarity, and exercising agency in contexts where formal planning often ignores or displaces them. For instance, the everyday acts of fixing electricity lines, digging drainage ditches, or reinforcing homes in informal settlements are not only technical responses but political practices of autonomy and resilience (Simone 2008).

Rather than a one-time fix, repair should be understood as a long-term intervention that disrupts cycles of disposability embedded in dominant models of urban development. In contexts where infrastructure is deliberately under-maintained or withdrawn – as in many townships and inner-city housing blocks in South Africa – repair resists abandonment by sustaining value, continuity, and social presence. It celebrates the *how* of making, foregrounding cycles of iterative making and remaking as creative and social acts, rather than privileging the one-off, aesthetically oriented celebration of a finished structure or building. This perspective foregrounds repair as a generative practice: iterative, creative, and capable of responding to environmental precarity and social fragmentation (Berger/Irvin 2023). Towards which, urban scholar Gautam Bhan conceptualizes repair as a relational practice, underscoring the potential for localized, context-specific solutions to catalyze broader transformations within urban ecosystems (Bhan et al. 2018). This is particularly vital in southern cities (Watson 2014), where narratives often label certain places uninhabitable due to violence, poverty, or infrastructural collapse. Scholars such as AbdouMaliq Simone have emphasized the capacity of residents in such contexts to transform their environments through everyday acts of maintenance, adaptation, and relational repair (Simone 2008). Bhan extends this, framing repair as an inherently southern practice – less about technical correction than about cultural and political intervention rooted in situated knowledge and resilience (Bhan 2019). Examples include community-managed sanitation systems in Nairobi's Mathare settlement, or the incremental upgrading of stormwater channels in Dar es Salaam led by resident associations (Bhan et al. 2017).

These inclusive and equitable reparative practices invite a rethinking of how spatial practitioners engage with cities – both in terms of material form

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

and the social systems that shape them. Medellín's long-term investment in neighborhood-scale infrastructure co-designed with residents demonstrates how repair and social inclusion can shift urban governance. Similarly, Cape Town's »Reblocking« projects – where informal housing layouts are reorganized collaboratively to allow for drainage and service access – show how participatory repair practices strengthen both physical and social resilience.

Central to this shift, as Castán Broto et al. (2021) and Ortiz (2022) argue, is moving away from top-down planning toward participatory and collaborative modes of practice where historically marginalized voices are central to outcomes. Understanding repair as a relational practice deepens this reorientation, offering a lens to view ongoing maintenance, adaptation, and transformation in relation to climate change. It foregrounds multi-authorship, emphasizing that resilient cities are shaped collectively through diverse knowledge systems, lived experiences, and community practices. This orientation has significant implications for climate adaptation. Reparative practices can be seen in co-designed flood management in Cape Town's Philippi settlement, where residents map vulnerabilities and build retention ponds; in incremental housing upgrades in Johannesburg's inner city, where residents repair and adapt buildings in defiance of eviction threats; and in community land trusts in US cities such as Boston, where residents collectively manage land and housing to resist displacement. By recognising the social dimensions of vulnerability, such practices contribute to physical resilience and the healing of communities fragmented by inequality. They foster dignity, belonging, and agency in places long denied them.

Looking at two practices in settler colonial contexts,[2] the work of organisations such as 1to1 – Agency of Engagement offers insight into these principles. Through a multi-scalar, participatory design approach, 1to1 provides a compelling alternative to conventional planning models – centering collaboration and long-term engagement. Similarly, Studio O, led by Liz Ogbu in the United States, integrates reparative methodologies into architectural processes, working with communities to address inequality and foster healing. Both reject prescriptive solutions in favour of adaptive processes rooted in co-authorship, care, and relationality.

2 *Settler colonial contexts* refer to countries where colonial structures established enduring racialised land dispossession and spatial inequality, such as South Africa, the United States, Canada, and Australia.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

Liz Ogbu's work in Akron, Ohio, addressing displacement caused by the Innerbelt highway, illustrates this. Through grief-sharing workshops, storytelling, and collective reimagining of the site, Ogbu helped residents process loss and secure resources to reconnect fractured urban space (Greenspan 2018). This process-centered repair demonstrates how design can serve both material and emotional needs. In South Africa, 1to1's long-term involvement in Slovo Hall exemplifies repair as sustained practice. Built, adapted, and maintained over more than a decade, the Hall reflects a co-produced legacy where architecture is bound to ongoing community life. Repair is as much about sustaining relationships and governance structures as maintaining bricks and mortar. Importantly, practitioners deliberately displaced their professional privilege, working outside remuneration and sharing authorship with community members.

Together, 1to1 and Studio O show how architectural practices that do not solely focus only on built products as their primary offering can serve as a sustained act of reparative urbanism. Their work is not rhetorical but iterative, grounded in trauma, power, and collaboration. Whether through participatory mapping, storytelling, or co-produced infrastructure, they demonstrate that repair addresses not only places but the relationships and systems that shape them – and affect spaces long after the involvement of professionals.

Conclusion: Reparative Architectural Practices

Through my long-term involvement in spatial practice as co-founder – and now advisor – of 1to1, my exploration of reparative approaches to systemic injustice has led to a critical understanding: Repair is not an endpoint but a process. It is a sustained, ongoing journey that embraces imperfection and acknowledges structural inequities without assuming the possibility of absolute resolution (Berger/Irvin 2023c). This understanding calls for a collective commitment to interrogating and transforming the systems we inhabit. Framed as a continuous and reflexive engagement, repair urges a departure from conventional problem-solving toward methods rooted in curiosity, care, humility, and learning. Within this framework, physical infrastructures and socio-political obstacles are no longer seen as static barriers, but as opportunities for transformative and creative responses – an enactment of ethical responsibility through design.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

2.
Slovo Hall in repair (1to1, 2010 – 2022). Photographs by author.

3.
An artefact of grassroots repair from inner-city Joburg. Photograph (cutout) by author.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

Crucially, the concept of repair extends beyond the material, encompassing the moral and social fabrics torn by histories of colonialism, enslavement, and structural racism (Ganguly 2023). While some harms may never be fully repaired, the act of engaging with the socio-technical dynamics of systemic brokenness retains deep symbolic and political value. Repair becomes a way of working through systemic inequality, often maintaining rather than restoring (fig. 3), while signalling an ongoing commitment to justice. The notion of repair as a »double bind« – simultaneously necessary and impossible – reveals its layered complexity. Public acts of reparation, such as South Africa's Truth and Reconciliation Commission, demonstrate that repair is not about returning to an idealised past, but about constructing ethical futures within the limits of what can be redressed (Krog 2009; Ganguly 2023).

In this light, repair demands continuous reflection, adaptation, and context-sensitive action. It fosters a critical balance between historical awareness and future aspirations within cultural and communal spheres. This includes working alongside young people, responding to evolving socio-political conditions, and embedding care within the practice of spatial design (Berger/Irvin 2023a). Acknowledging the limits of reparative intervention does not diminish its value; instead, it reinforces the need to embrace repair as a grounded, justice-oriented practice – an essential foundation for broader systemic transformation. Recognising that the complete undoing of past harm may be impossible, reparative action becomes an expression of humility, solidarity, and resilience. In architecture and urbanism, this translates into a departure from singular, technocratic solutions in favour of layered, situated responses to deep-rooted inequality. Reparative frameworks acknowledge that spatial interventions may not erase injustice, but they can enable new relationships, expand agency, and cultivate a sense of belonging.

Here, reparation is not limited to material restitution; it operates as a symbolic and political practice to heal collective wounds through cultural and social processes (Berger/Irvin 2023b; Kemper/Rutten 2023). It insists on acknowledging harm, affirming dignity, and supporting collective futures rooted in self-determination and liberation. Rather than positioning repair as a form of improvement in the developmental sense, this approach sees it as the sustained maintenance of dignity and coexistence within fractured urban contexts. Against the backdrop of colonial legacies, modernist planning, and donor-driven development – each of which has marginalized vulnerable communities – reparative urbanism offers a critical alternative.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

Designers such as Markus Berger and Kate Irvin describe repair as a form of empowerment and agency that resists environmental degradation and socio-political fragmentation (Berger/Irvin 2023d). Their work reframes repair as a generative design ethos – one that expands the capacity of design to imagine and construct more just ecological, social, and spatial futures.

This perspective necessitates a critical reassessment of spatial methodologies. It compels practitioners to ask who benefits from spatial interventions and how these decisions impact marginalized communities. The racialised geographies shaping Liz Ogbu's work in the United States and 1to1's work in Slovo Park reveal a shared commitment to relationality, equity, and lived experience as central to the design process (Ogbu 2019; Tissington 2012). These practices reject dominant paradigms that treat space as neutral or static, instead recognising spatial production as socially embedded and politically active.

For the discipline of spatial design, this relational orientation opens new pathways for how we build and inhabit cities. It demands a shift from simply constructing buildings to cultivating environments that foster social cohesion and respond to spatial inequality. In this context, repair becomes a layered and multifaceted practice – encompassing informality, infrastructural adaptation, and the co-production of urban life. It values local knowledge, supports collective governance, and challenges the technocratic, extractive tendencies of mainstream planning. The tools and methods of spatial repair must emerge from within communities themselves, shaped by their own histories, practices, and aspirations.

In response, this paper proposes a reparative framework for architectural practice that reorients the field toward climate justice and spatial equity. Rather than optimising for efficiency or performance alone, reparative design entails an epistemological shift: One that views architecture as a negotiated, care-based process rooted in context, history, and community. Drawing from the practices of Studio O and 1to1, I outline five interlinked practices that embody this reparative orientation: Acknowledging and situating architectural work within histories of spatial harm; co-authoring spatial knowledge through long-term, horizontal partnerships; embedding care and deliberation into design methods as integral processes; activating local infrastructures through adaptive, community-led planning; and sustaining networks of solidarity across disciplines, scales, and geographies.

These principles offer an expanded framing of architectural agency in an era of intersecting crises. While reparative urbanism cannot deliver perfect

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

solutions – particularly in the face of climate apartheid – it affirms a politics of presence, humility, and responsibility. Under this lens, architecture is no longer defined by what it produces, but by how it engages, repairs, and sustains the relationships and systems it touches.

References

1to1 – Agency of Engagement. (2019): »*A Reflective Engagement: 2010–2018*,« Johannesburg: 1to1 – Agency of Engagement. https://1to1temp2020.wordpress.com/2019/02/01/a-reflective-engagement-2010-2018/, accessed September 12, 2025.

Alston, Philip (2019): »*Climate change and poverty: Report of the Special Rapporteur on extreme poverty and human rights (A/HRC/41/39)*,« Geneva: United Nations Human Rights Council. https://www.ohchr.org/en/documents/thematic-reports/ahrc4139-climate-change-extreme-poverty-and-human-rights-report, accessed September 12, 2025.

Berger, Molly/Irvin, Kate (2023): »*Repair: Sustainable Design Futures*,« London: Routledge.

Bhan, Gautam (2019): »*Notes on a Southern urban practice*,« Environment & Urbanization 31/2, 639–654. doi: /10.1177/0956247818815792

Bhan, Gautam/Srinivas, Smita/Watson, Vanessa, eds. (2018): »*The Routledge Companion to Planning in the Global South*,« London: Routledge.

Brisman, Avi/South, Nigel/Walters, Reece (2018): »Climate apartheid and environmental refugees,« in: Kerry Carrington/Russell Hogg/John Scott/Maximo Sozzo (eds.), *The Palgrave Handbook of Criminology and the Global South, Cham: Springer International Publishing*, 301–321. doi: 10.1007/978-3-319-65021-0_16

Castán Broto, Vanesa/Boyd, Emily/Ensor, Jonathan (2021): »*Reparative climate justice and development futures*,« Journal of the British Academy 9/S1, 141–165. doi: 10.5871/jba/009s1.141

Chen, Xiangming (2014): »Steering, speeding, scaling: China's model of urban growth and its implications for cities of the global South,« in: Susan Parnell/Sophie Oldfield (eds.), *The Routledge Handbook on Cities of the Global South*, London: Routledge, 155–172.

Crysler, C. Greig/Cairns, Stephen/Heynen, Hilde, eds. (2012): *The SAGE Handbook of Architectural Theory.* London: SAGE.

Cuff, Dana (1991): *Architecture: The Story of Practice.* Cambridge, MA: MIT Press.

Dutton, Thomas A. (1991): *Voices in Architectural Education: Cultural Politics and Pedagogy.* New York: Bergin & Garvey.

Fremstad, Anders/Paul, Mark (2019): »*The impact of a carbon tax on inequality*,« Ecological Economics 163, 88–97. doi: 10.1016/j.ecolecon.2019.04.016

Friedlingstein, Pierre/Jones, Matthew W. /O'Sullivan, Michael et al (2022): Global Carbon Budget 2022. *Earth System Science Data* 14/4, 1917–2005. doi: 10.5194/essd-14-1917-2022

Ganguly, Pritika (2023): *Reparation and Its Limits: Symbolism in Justice and Healing*, Manchester: Manchester University Press.

Hickel, Jason (2020): *Less Is More: How Degrowth Will Save the World.* London: William Heinemann.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

Hughes, Sara/Hoffmann, Matthew (2020): »*Just urban transitions: Toward a research agenda*.« Wiley Interdisciplinary Reviews: Climate Change 11/3, e640. doi: 10.1002/wcc.640

Institute for European Environmental Policy (IEEP). (2020): »*More than half of all CO_2 emissions since 1751 emitted in the last 30 years*.« https://ieep.eu/news/more-than-half-of-all-co2-emissions-since-1751-emitted-in-the-last-30-years/, accessed September 12, 2025.

Jasrotia, Rakesh (2016): »Climate justice: A voice for the global South,« *Environmental Policy and Law* 46/2, 78–83. doi: 10.57749/fjqf-gm87

Long, Joshua/Rice, Jennifer L. (2019): »From Sustainable Urbanism to Climate Urbanism,« *Urban Studies* 56/5, 992–1008. doi: 10.1177/0042098018770846

Mbembe, Achille (2017): »*Critique of Black Reason*,« Durham (NC): Duke University Press.

Mignolo, Walter D. (2011): »*The Darker Side of Western Modernity: Global Futures, Decolonial Options*,« Durham (NC): Duke University Press.

Ogbu, Liz/Bouie, Jamelle (2022): »*On Repair« [Video]*, Charlottesville: UVA School of Architecture, https://www.youtube.com/watch?v=bkkSoon8GFw, accessed September 12, 2025.

Paice, Edward (2021): »*Youthquake: Why Africa's demographic edge matters*,« London: Headline.

Quijano, Aníbal (2000): »Coloniality of power, Eurocentrism, and Latin America,« *Nepantla: Views from South* 1/3, 533–580.

Raworth, Kate (2017): »*Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*,« London: Random House Business.

Silver, Jonathan (2023): »Infrastructure, adaptation and politics in African cities,« in: Adriana Allen/ Sarah Colenbrander (eds.), *Urban Infrastructures in a Changing Climate*, London: Routledge, 75–92.

Simone, AbdouMaliq (2004): »People as infrastructure: Intersecting fragments in Johannesburg,» *Public Culture* 16/3, 407–429. doi: 10.1215/08992363-16-3-407

Spelman, Elizabeth V. (2003): »*Repair: The Impulse to Restore in a Fragile World*,« Boston, MA: Beacon Press.

Statista (2020): »*Median age in Africa 2000–2030*,« https://www.statista.com/statistics/1226158/median-age-of-the-population-of-africa/, accessed September 12, 2025.

Sultana, Farhana (2022): »The unbearable heaviness of climate coloniality,« Political Geography 102, 102684. doi: 10.1016/j.polgeo.2022.102684

Swanson, Ana (2015): »*How China used more cement in 3 years than the U.S. did in the entire 20th century*,« Washington Post, March 24, 2015, https://www.washingtonpost.com/news/wonk/wp/2015/03/24/how-china-used-more-cement-in-3-years-than-the-u-s-did-in-the-entire-20th-century/, accessed September 12, 2025.

Till, Jeremy (2009): »*Architecture Depends*,« Cambridge, MA: MIT Press.

Tissington, Kate (2011): »*A Resource Guide to Housing in South Africa 1994–2010: Legislation, Policy, Programmes and Practice*,« Johannesburg: Socio-Economic Rights Institute of South Africa (SERI). https://www.seri-sa.org/index.php/research/all-publications/resource-guides, accessed September 12, 2025.

Tuana, Nancy (2019): »Climate apartheid: The forgetting of race in the Anthropocene,« *Critical Philosophy of Race* 7/1, 1–31. doi: 10.5325/critphilrace.7.1.0001

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY

United Nations Environment Programme (UNEP) (2024): *2024 Global Status Report for Buildings and Construction*, Nairobi: UNEP, https://globalabc.org/sites/default/files/2025-03/Global-Status-Report-2024_2025.pdf, accessed September 12, 2025.

Watson, Vanessa (2014): »The case for a Southern perspective in planning theory,« *International Journal of E-Planning Research* 3/1, 23–37. doi: 10.4018/ijepr.2014010102

World Economic Forum (2021): *Net-Zero Challenge: The supply chain opportunity*, https://www.weforum.org/publications/net-zero-challenge-the-supply-chain-opportunity/, accessed September 12, 2025.

https://doi.org/10.14361/dak-2024-0815 https://www.inlibra.com/de/page/agb - Open Access - (cc) BY