

NO PLAN, NO HOPE: RECLAIMING SUSTAINABILITY THROUGH PLACE-BASED TRANSITIONS

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Abstract

This essay advances sustainability not as a fixed end state, but as a dynamic, culturally grounded process of societal transformation. Drawing on the Horizon 2020 TREnD project and the COST Action Underground4Value, it argues that transition studies offer valuable frameworks to navigate complexity without falling into determinism. A transatlantic comparison of four urban regeneration initiatives in the U.S. and Belgium shows how place-based, culturally resonant strategies strength innovation, equity, and civic engagement. The study highlights that successful transitions emerge not from standardised models, but from context-sensitive approaches. Finally, by reintroducing culture into sustainability discourse, the essay calls for a redefinition of planning as a reflexive, ethical, and hopeful act, connecting vision with reality, and empowering communities to co-create meaningful, just, and sustainable futures.

Keywords: Sustainability, Transition Studies, Planning, Green Initiatives, Cultural Heritage

1. Introduction

“Without a planet, there is no business”¹. This stark warning, once the rallying cry of environmentalists and now echoed across boardrooms and policy circles, captures the existential urgency of our time. Alongside this recognition, however, another insight is gaining ground: “Investing in the

¹ A. WINSTON, *The One Thing Every Business Dies Without*. Harvard Business Publishing, Harvard, 2015.

environment is a catalyst for growth”². Taken together, these statements recast sustainability not as a constraint on economic ambition, but as its most enduring foundation. Far from being a peripheral concern, sustainability emerges as the strategic horizon within which all meaningful development must unfold.

My engagement with these issues began in 1994, through a research project focused on sustainable development in the Maghreb region³. At that time, the concept - recently popularised by the Brundtland Commission’s landmark report⁴ - was still evolving, promising in theory, yet contested in practice. This early experience raised a foundational question: how can one design a roadmap for something so fluid, so perpetually unfolding, and so intricately interwoven with all aspects of human and ecological systems?

Over the decades, it has become increasingly evident that sustainability cannot be approached as a fixed end state. Rather, it represents an ongoing process of adaptation, an evolving negotiation across spatial scales, temporal horizons, and institutional regimes. It is less a static goal than a dynamic capacity to steer change within complex, interdependent systems. This realisation led me to consider sustainability not solely as a policy objective or scientific construct, but as a conceptual framework that must reckon with the underlying condition of impermanence⁵.

Humans are naturally inclined to invest emotionally and materially in perceived images of permanence: the protective structure of the home, the resilience of interpersonal relationships, the durability of institutions, and the solidity of the built environment. These elements provide continuity and orientation in an otherwise uncertain world. Yet at their core, each is marked by transience. We experience life moment by moment, often imagining permanence where only change exists. Homes, bonds, identities,

² WORLD ECONOMIC FORUM, *3 Principles to Help Impact Investing*, WEF, 2024. Online: <https://www.weforum.org/stories/2024/06/redefining-economic-growth-impact-investing/>

³ G. PACE, “La tutela ambientale nel Maghreb: problematiche e prospettive”, in *Maghreb: Algeria, Marocco, Tunisia verso uno sviluppo sostenibile*, edited by I. CARUSO, E. PETRONCELLI, E.S.I., Napoli, 1997.

⁴ UNITED NATIONS, *Report of the World Commission on Environment and Development: Our Common Future*, Annex to document A/42/427 - Development and International Co-operation: Environment. UN, New York, 1987.

⁵ The concept of impermanence refers to the transient and changing nature of all things, including reality itself. Everything is in a constant state of flux. Nothing is permanent or fixed. This concept is a core principle in numerous philosophies and religions, such as Buddhism and ancient Greek thought. See N. HEGARTY, *Impermanence. Essays*, No Alibis Press, Belfast, 2022.

and even nations, none of these are immutable. Historical narratives and personal experiences alike attest to the fundamental instability of our lives and institutions.

Viewed through this lens, sustainability is not about preserving a static order but about equipping societies to navigate transformation. It demands capacities that enable individuals, communities, and institutions to respond to disruption while maintaining coherence and direction. Accordingly, sustainable development should not be founded on rigid models or idealised end states, but on adaptive frameworks that embrace uncertainty, diversity, and complexity.

This perspective is particularly salient in the context of urban and regional planning. While it is relatively easy to conceptualise cities designed around green neighbourhoods, soft mobility, short distances, and proximity-based services, planners and decision-makers must contend with inherited realities of dense, layered urban fabrics, shaped by long-standing spatial, economic, and social patterns. Urban environments are not blank slates. They are the product of layered histories, embedded infrastructures, and path-dependent choices. These configurations present physical and functional constraints that cannot be ignored. These existing configurations present physical and functional limitations that cannot be disregarded. Moreover, urban systems must respond to a multiplicity of needs: efficient freight distribution, mobility solutions for individuals with special needs, and infrastructures that serve both central and peripheral populations. Idealised models of proximity urbanism⁶ must be balanced with the practicalities of contemporary urban life.

Throughout my research, ranging from sustainable transportation⁷ and

⁶ Cfr. C. MORENO, Z. ALLAM, D. CHABAUD, C. GALL, F. PRATLONG, “Introducing the ‘15-Minute City’: Sustainability, Resilience and Place Identity in Future Post-Pandemic Cities”. *Smart Cities*. 4 (1), 2021, pp. 93-111. doi:10.3390/smartcities4010006.

⁷ Cfr. V. REIS, J.F. MEIER, G. PACE, R. PALACIN, “Rail and multi-modal transport”, in *Research in Transportation Economics*, vol. 41, n.1, 2013, pp. 17-30; S. GAUTAMA, D. GILLIS, G. PACE, I. SEMANJSKI, “Cohousing and EV Sharing: Field-tests in Flanders”, in *E-Mobility in Europe. Trends and Good Practice* edited by W. Leal Filho and R. Kotter, Springer-Verlag GmbH, Berlin (DE), 2015; G. PACE, S. RICCI S., “Multimodal, Intermodal and Terminals”, in *Sustainable Rail Transport. Proceedings of RailNewcastle Talks 2016*, edited by M. MARINOV, Springer International Publishing AG, 2018, pp 193-206; G. PACE, “Sustainable ports for a Mediterranean blue economy”, in *Mediterranean Economies 2020* edited by S. Capasso, G. Canitano, Il Mulino, Bologna, 2020, pp. 247-288.

cultural heritage valorisation⁸ to European policy frameworks and community-driven transitions, it has become increasingly clear that the principal challenge of sustainability lies in its demand for integration. The environmental, economic, social, and cultural dimensions of development are not isolated variables. They are interdependent and mutually reinforcing. However, among these dimensions, the cultural aspect remains the most frequently neglected. Too often, it is treated as ornamental rather than foundational.

In fact, culture plays a decisive role in shaping how societies perceive problems, articulate values, and envision futures⁹. It influences whether sustainability is experienced as a technocratic imposition or embraced as a shared, meaningful endeavour. Without a cultural anchoring, sustainability risks becoming a procedural exercise. With it, sustainability can become a human project grounded in lived experience, collective memory, and civic imagination.

This recognition is especially vital in a context marked by overlapping crises, what some have termed a “polycrisis” or “permacrisis”¹⁰. Climate disruption, political fragmentation, cultural erosion, and economic instability all compound to erode societal confidence and coherence. In such a context, hope cannot be taken for granted¹¹. Like clean air or potable water, hope becomes a scarce and contested resource. It cannot remain a vague aspiration. Hope must be planned. It must be cultivated through inclusive, adaptive, and evidence-based strategies.

Under these conditions, planning assumes a role that is both civic and ethical. It becomes more than a technical discipline; it becomes a structured act of hope. Planning, when conceived as such, is not an expression

⁸ Cfr. G. PACE, “Planning Approaches for Heritage-led Community Development” in *Preserving, Managing, and Enhancing the Archaeological Sites: Comparative Perspectives between China and Italy*, edited by L. GENOVESE, H. YAN, A. QUATTROCCHI, CNR Edizioni, Rome, 2018, pp. 163-172; G. PACE, R. SALVARANI (eds), *Underground Built Heritage Valorisation: A Handbook. Proceedings of the First Underground4value Training School*, CNR Edizioni, Rome, 2021; S. MARTÍNEZ RODRÍGUEZ, G. PACE (eds), *Practices for the Underground Built Heritage Valorisation. Second Handbook. Proceedings of the Second Underground4value Training School*, CNR Edizioni, Rome, 2023; G. Pace (ed), *Il Rione Sanità e il cimitero delle Fontanelle. Un laboratorio vivente*, CNR Edizioni, Roma, 2023.

⁹ Cfr. L. FUSCO GIRARD, P. NIJKAMP, *Le valutazioni per lo sviluppo sostenibile della città e del territorio*. FrancoAngeli editore, Milano, 1997, pp. 29-32.

¹⁰ Cfr. C. SARKAR, P. KOTLER, E. FOGLIA, *Regeneration: The Future of Community in a Permaccrisis World*, IDEA BITE PRESS, Austin, TX, 2023.

¹¹ Cfr. S. ZAMAGNI, *L'economia del bene comune*. Edizioni Città Nuova, Roma, 2007.

of passive or naïve optimism. It is a deliberate practice that builds resilience within impermanence, translates long-term visions into actionable pathways, coordinates across competing interests, and guides transitions across spatial and temporal scales. It is through planning that societies can learn to move not in spite of change, but with it.

This paper advances the argument that sustainability can be meaningfully reclaimed through the lens of the transition studies¹². This interdisciplinary field provides strategic tools – such Transition Management¹³, or Strategic Transition Practice¹⁴ – that enable societies to navigate complexity without falling into the trap of determinism. Transition scenarios offer multiple trajectories. These are grounded in current realities yet remain open to emergent possibilities. They acknowledge that the future is not predetermined, but shaped through processes of deliberation, design, and collective agency.

In this light, sustainability is not a final state to be achieved, but a collective capacity to adapt, regenerate, and imagine better worlds. Such transformation demands more than ambition. It requires method, strategy, and intent. It requires planning.

The reflections presented here draw upon insights developed through two European-funded research projects. The first, the Horizon 2020 Marie Skłodowska-Curie project “Transition with Resilience for Evolutionary Development (TRENd)”¹⁵ (2019-2024), investigated place-based strategies for inclusive and resilient territorial transitions. The second, the

¹² Cfr. A. Rip, R. Kemp, “Technological change”, in *Human Choice and Climate Change*, edited by S. Rayner, L. Malone, Washington DC, Batelle Press, 1998; F.W. GEELS, *From sectoral systems of innovation to socio-technical systems. Insights about dynamics and change from sociology and institutional theory*, Research Policy, 33 (6-7), 2004, pp. 897-920; J. GRIN, J. ROTMANS, J. SCHOT, F.W. GEELS, D. LOORBACH, D., *Transitions to Sustainable Development*. New York, Routledge, 2010; F.W. GEELS, R. KEMP, G. DUDLEY, G. LYONS (eds.), *Automobility in Transition? A Socio-Technical analysis of Sustainable Transport*. London, Routledge, 2012; F. MACEBO, I. SACHS (eds) (2015), *Transitions to Sustainability*. Springer Science+Business Media, Dordrecht, 2015.

¹³ Cfr. R. KEMP, D. LOORBACH, J. ROTMANS, *Transition management as a model for managing processes of co-evolution towards sustainable development*. The International Journal of Sustainable Development and World Ecology, special issue on “(Co)-Evolutionary approach to sustainable development”, 2005; R. KEMP, D. LOORBACH, ‘Transition management: a reflexive governance approach’, in *Reflexive Governance for Sustainable Development*, edited by J. VOSS, D. BAUKNECHT, R. KEMP, Edward Elgar, Cheltenham, 2006.

¹⁴ Cfr. G. PACE, “Heritage Conservation and Community Empowerment. Tools for Living Labs”, in *Underground Built Heritage Valorisation: A Handbook*, cit. 2021, pp. 197-234.

¹⁵ See <https://cordis.europa.eu/project/id/823952>.

COST Action “Underground4Value” (2019-2023)¹⁶ explored the role of Underground Built Heritage in fostering sustainable community-led local development. Together, these projects offer a critical framework for interpreting sustainability transitions not as theoretical abstractions, but as concrete, context-sensitive practices, anchored in specific communities and territories, and shaped by the dynamic interplay between cultural values, spatial planning, and innovation.

2. *Toward a Convergent, Reflexive Sustainability Paradigm: A Transatlantic comparison*

As part of the TRENd project, we carried out a comparative analysis of green initiatives across the United States and Europe to explore how context-sensitive, place-based strategies advance sustainability¹⁷. This article focuses on four emblematic cases: two green neighbourhoods in peri-urban settings and two greenways developed along repurposed railway corridors. Together, these examples provide critical insights into how diverse models of urban regeneration and environmental innovation are shaped by specific socio-cultural contexts and institutional frameworks.

In the United States, the selected cases – the *Rock Island Greenway* and the *Trinity Bluff Project* – are located in Louisiana. In Europe, the *Brussels-Tervuren Promenade* and the *Vinderhout Cohousing* project are situated in Belgium. These initiatives represent distinct yet complementary pathways to green infrastructure and sustainable community development, informed by differing cultural values, governance logics, and spatial planning traditions.

¹⁶ See <https://www.cost.eu/actions/CA18110/#tabs|Name:overview>.

¹⁷ The comparative analysis presented in this work has been developed through the valuable collaboration of Donna Johnson (Louisiana Tech University), Gabriella Esposito (CNR IRISS), and Carmelina Bevilacqua (University of Rome La Sapienza). Their insights and expertise have been instrumental in shaping the methodological framework and enriching the interpretative dimensions of the study. Elements of this research have been previously tested and refined through a series of short papers and scholarly discussions presented at international academic venues, including the European Regional Science Association (ERSA) Congress, the Società Italiana degli Urbanisti (SIU) Conference, and the ITC-CNR Conference Days. Their contributions are gratefully acknowledged.

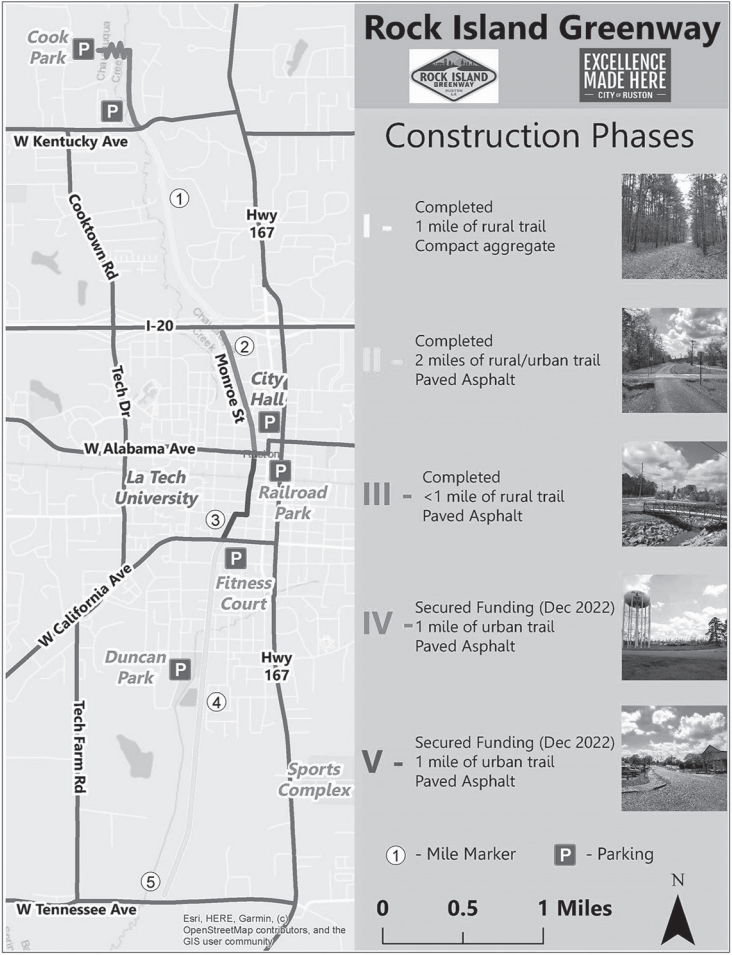


Figure 1. - *Rock Island Greenway map, Ruston (LA). Courtesy of the City of Ruston*

The *Rock Island Greenway*, located in Ruston, exemplifies the transformative potential of green infrastructure by repurposing disused railway lines to enhance urban connectivity and environmental quality. Extending over several miles (Fig. 1), the Greenway promotes non-motorised transport, improves stormwater management, and expands recreational access in a region historically characterised by car-dependence and fragmented

public space. Catalysed through federal-local collaboration, the project aligns environmental objectives with health, equity, and place-making. While modest in scale, it signals a strategic shift in infrastructural investment towards sustainability goals within smaller U.S. municipalities.

In contrast, the *Trinity Bluff Project* in Shreveport represents a market-driven approach to sustainability. Developed through a partnership between SWEPCO (a utility provider) and DSLD Homes (a private developer), the project integrates solar-powered microgrids, energy-efficient housing, and native landscaping near an affluent of the Red River, the ecologically sensitive Twelve Mile Bayou (Fig. 2). Despite its standardised housing typology, the project remains customisable and accessible, showcasing how economic scalability and technological innovation can be leveraged to achieve sustainability objectives.



Figure 2. - *Trinity Bluff Project, Shreveport (LA). Courtesy of DSLD Homes*

In Europe, the *Brussels-Tervuren Promenade* reclaims the path of Belgium's first electric railway, transforming it into a 10 km ecological corridor that links urban parks, supports biodiversity, and fosters soft mobility across four municipalities. Part of the broader "Promenade Verte", a 60-km green belt conceived in the late 1980s (Fig. 3), the project was developed through sustained regional and local planning efforts, reflecting Brussels' long-standing commitment to integrated ecological infrastructure. Managed by *Bruxelles Environnement*, it exemplifies the

transformation of mono-functional infrastructure into multifunctional ecological corridors. Footbridges have replaced former rail bridges to ensure continuity for both soft mobility and ecological flows (Fig. 4). The promenade also plays a key ecological role, with embankments that support native flora and fauna, while reinforcing a sense of place rooted in collective memory.

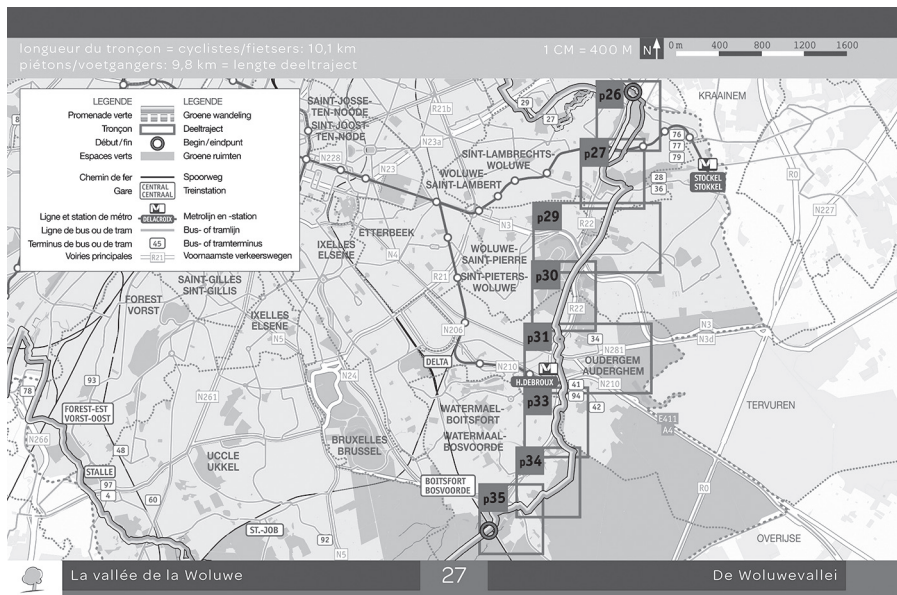


Figure 3. - *The Brussels-Tervuren Promenade Verte guidebook*



Figure 4. - *The footbridge on the Chaussee de Watermael. Source: Author*

The *Vinderhout* Cohousing project, located in Lievegem on the peri-urban fringe of Ghent, offers a powerful example of a community-driven model of sustainable living. Initiated in 2005 and inhabited since 2011, the development comprises 19 passive timber-framed homes designed for optimal solar gain and energy efficiency, through compact, south-facing units, strategic spacing for natural daylight, and extensive gardens (Fig. 5). Developed without a commercial real estate actor, the project reflects a strong ethos of collective ownership and participatory governance. Shared facilities – including a communal kitchen, guest accommodations, and a laundry room – are powered by a 10-kW photovoltaic system and booked via an internal online platform. In 2014, Vinderhout was selected as a pilot site for the Interreg IV “e-mobility NSR” project, testing electric car-sharing models in semi-urban contexts and placing the community at the forefront of regional sustainable mobility experimentation¹⁸. The project has since

¹⁸ Cfr. S. GAUTAMA ET AL., *Op. cit.*

inspired similar initiatives across Belgium, increasingly incorporating renewable energy systems and e-mobility infrastructure.



Figure 5. - *Map of the Vinderhout Cohousing, Lievegem (BE).*
Source: Foundation for Intentional Community (FIC), 2010

Despite differences in governance and scale, the Trinity Bluff and Vinderhout cases share key objectives: reducing environmental impact, enhancing energy resilience, and improving quality of life. However, their contrasting national contexts reveal deeper divergences. Trinity Bluff reflects the American emphasis on technological innovation and market-led solutions, while Vinderhout embodies European traditions of social innovation, trust, and collective agency. As one Vinderhout resident aptly noted, “People don’t enter cohousing because it’s a good deal, but because they believe in the added value it brings”. That *added value*, whether expressed through environmental stewardship, social belonging, or cultural engagement, underpins long-term behavioural change and policy relevance.

Public support plays a central role in the Brussels-Tervuren and Rock Island greenways. Both projects underscore how institutional commitment and civic engagement can catalyse spatial transformation and embed ecological values within urban planning. While European cases emphasise collaborative governance and spatial justice, U.S. examples highlight technological pragmatism, economic viability, and infrastructural retrofitting.

Despite their differences in scale, governance, and cultural context, all four cases converge on a fundamental insight: sustainability is not a singular technical challenge, but a complex, multifaceted pursuit. Achieving meaningful and lasting transitions requires the integration of environmental, social, cultural, and economic imperatives – an approach that transcends narrow metrics and embraces the richness of place-based realities. These transitions, however, cannot be engineered solely through infrastructure or policy instruments. They demand cultural and political shifts in which citizens are not just passive recipients of change, but active agents in shaping it. Public participation – across visioning, design, implementation, and stewardship – emerges as a critical ingredient in aligning policy objectives with local values, experiences, and aspirations. It is in this collective engagement that planning begins to operate not only as a technical function, but as a hopeful act: a way of projecting shared futures and mobilising capacity for transformation.

Across the cases examined, several enablers recur: adaptive reuse of space, the integration of green infrastructure, and participatory governance. Yet, their success is never guaranteed by design alone. Rather, their effectiveness depends on the interplay of local culture, institutional capacity, and regulatory flexibility. European cases, such as the Brussels-Tervuren Promenade and Vinderhout Cohousing, benefit from robust multi-level governance frameworks and traditions of cooperative urbanism that support long-term alignment across sectors. U.S. cases, including Rock Island Greenway and Trinity Bluff, rely more heavily on entrepreneurial initiative, civic resilience, and innovation from the grassroots – particularly in settings where public institutions adopt a more hands-off role.

These comparative insights reinforce a key finding: there is no universal model for sustainable transition. Instead, successful pathways emerge through context-aware strategies and dynamic governance models – models capable of bridging technological innovation with social cohesion, and balancing top-down policy mechanisms with bottom-up initiatives. What ultimately unites these diverse experiences is not a shared methodology, but a shared ethos: sustainability as a living, evolving process grounded in place, guided by care, and animated by hope. Planning, in this light, becomes more than a tool for managing change; it becomes a medium for expressing collective agency, navigating complexity, and designing transitions that are not only feasible but also desirable and just.

This reflection invites a broader reconsideration of sustainability itself. Originally focused on environmental conservation, the concept has expanded into a holistic paradigm incorporating cultural, economic, and social dimensions. Influenced by interdisciplinary scholarship and transatlantic exchange, foundational ideas such as ecological integrity¹⁹, steady-state economics²⁰, circular economy²¹, and post-growth development²², continue to shape planning discourse globally. Despite methodological differences, these frameworks converge in their emphasis on aligning human development with planetary boundaries.

Contemporary conceptual models like Raworth's Doughnut Economics²³ and Elkington's triple bottom line²⁴ illustrate this paradigmatic shift toward systems thinking. Planning, in this context, must transcend its traditional technocratic role to become an anticipatory and adaptive practice an art of designing transitions. It requires bridging long-term visions with grounded realities and uniting fragmented agendas under a shared sustainability ethos. Rather than merely managing growth, planning should be understood as an ethical and creative endeavour – capable of navigating complexity, fostering resilience, and catalysing meaningful change. This reframing compels us, as planners, researchers, and citizens, to ask not only what future we want, but what future the planet can sustain.

¹⁹ Cfr. A. LEOPOLD, *A Sand County almanac and sketches here and there*. Oxford Univ. Press, New York, 1949

²⁰ Cfr. H. DALY, *Steady State Economics. The Economics of Biophysical and Moral Growth*. W.F. Freeman, San Francisco, 1977.

²¹ Cfr. K.E. BOULDING, *The Future of Personal Responsibility*. American Behavioral Scientist, 15(3), 1972, pp. 329-359. <https://doi.org/10.1177/000276427201500303>; A.C. SAVY, A. SARKAR, *Restoring the holistic circular economy for socio-ecological equilibrium with Boulding*. Congrès Interdisciplinaire sur l'Économie Circulaire 2024, Défi Circulades; AIFREC, Jun 2024, Montpellier, France.

²² T. JACKSON, *Post Growth: Life after Capitalism*, Polity, Cambridge, 2021. Cfr. also P. NIJKAMP, A. PERRELS, *Sustainable Cities in Europe*. Routledge, London, 1994; M. FELDMAN, M. RATNATUNGA, A. NIMS, *Place-based economic development: Creating growth in the heartland*. Heartland Forward, 2023. Retrieved from <https://heartlandforward.org/case-study/place-based-economic-development/>.

²³ Cfr. K. RAWORTH, *Doughnut Economics: Seven Ways to Think Like a 21st-Century Economist*. Penguin Random House UK, London, 2018.

²⁴ Cfr. J. ELKINGTON, *Cannibals with Forks: The Triple Bottom Line of 21st Century*. Capstone Publishing Ltd, Mankato, MN, 1999.

3. *Reframing Sustainability Transitions Through Cultural Heritage and Strategic Transition Practice*

Building on the comparative perspectives explored in the previous section, it becomes increasingly evident that the sustainability discourse must evolve beyond technical frameworks and economic metrics. While environmental, economic, and social dimensions have progressively shaped the global sustainability agenda, the cultural dimension remains critically underrepresented in mainstream policy approaches, despite its potential to anchor long-term resilience, identity, and transformative agency.

This gap was a central concern during my tenure as Chair of the COST Action *Underground4Value*²⁵, an initiative that brought together scholars, practitioners, and policymakers across Europe to explore how the reuse and valorisation of underground built heritage can catalyse sustainable transitions. The Action illuminated the transformative role of cultural heritage, not merely as a repository of memory, but as a vector of innovation, identity, and civic agency, particularly in places grappling with complex, overlapping crises.

To operationalise these insights, the Action developed the Strategic Transition Practice (STP)²⁶, a flexible, iterative framework designed to guide transformative change in heritage contexts. This approach was tested and refined through 13 Living Labs situated in diverse European environments, functioning as real-world experimentation arenas. These Labs enabled multi-actor collaboration, shared learning, and context-sensitive adaptation, revealing how heritage-led strategies, if co-created and continuously negotiated, could become catalysts for regeneration and social innovation.

These processes inevitably brought us to the sustainability concept as a central analytic node. In the context of urban heritage, sustainability is often invoked to reinforce the conservation agenda within broader development paradigms. According to UNESCO's Historic Urban Landscape (HUL) approach, the "active protection of urban heritage and its sustain-

²⁵ Cfr. G. PACE, "Heritage Conservation and Community Empowerment. Tools for Living Labs", in *Underground Built Heritage Valorisation: A Handbook. Proceedings of the First Underground4value Training School*, edited by G. PACE, R. SALVARANI, CNR Edizioni, Rome, 2021, pp. 197-234.

²⁶ Cfr. G. PACE, *op. cit.*, 2021. See also <https://toolbox.underground4value.eu/>.

nable management is a *condicio sine qua non* of development”²⁷, and heritage conservation itself is seen as “a strategy to achieve a balance between urban growth and quality of life on a sustainable basis”²⁸. HUL proposes a comprehensive and integrated planning model, aiming to mediate environmental, economic, and cultural priorities through inclusive governance and long-term stewardship. The approach defines sustainability as “a balanced relationship between the urban and natural environment, between the needs of present and future generations and the legacy from the past”²⁹.

However, HUL’s operational guidance remains somewhat limited in scope. It provides important principles – such as prioritising partnerships, local governance mechanisms, and stakeholder coordination – but it stops short of addressing the deep systemic and multi-scalar changes required to navigate sustainability transitions. Particularly absent is a clear recognition of the uncertainties, conflicts, and socio-cultural transformations that characterise such transitions³⁰. Effective adaptation, as Underground4Value found, requires acknowledging this complexity and embracing experimentation, learning, and situated responses rather than relying solely on formalised conservation³¹.

From this perspective, culture offers not only continuity with the past but also a forward-looking compass capable of restoring meaning and belonging in increasingly fragmented and risk-prone societies. Cultural sustainability does not merely protect heritage, but it activates it, enabling communities to reinterpret identities and environments as living laboratories for innovation and regeneration. This perspective aligns closely with the STP framework, which conceives sustainability transitions as normative and situated processes. Rather than focusing exclusively on technological or institutional change, STP underscores the importance of reorienting narratives, practices, and collective capabilities³².

At the core of this reframing lies the capacity of communities to engage with complexity, navigate uncertainty, and explore viable pathways for collective transformation. This involves not only technical knowledge and

²⁷ UNESCO, 36 C/23 *Recommendation of Historic Urban Landscape*, UNESCO, Paris, 2011. Available online <https://whc.unesco.org/en/hul>.

²⁸ *Ivi*, pp. 1-3.

²⁹ *Ivi*, p. 4.

³⁰ Cfr. G. PACE, *op. cit.*, 2021.

³¹ Cfr. G. PACE, *op. cit.*, 2021, pp. 229-230.

³² *Ibidem*.

institutional support, but also the ability to mobilise cultural resources, reinterpret shared values, and sustain meaningful participation over time. Yet, in practice, current policy frameworks often fail to integrate these symbolic, emotional, and narrative dimensions, by privileging instead quantifiable indicators and technocratic targets. This disconnects risks marginalising local knowledge, flattening diversity, and ultimately undermining the very resilience and legitimacy that sustainability strategies seek to foster.

In our work, we explicitly chose to confront this gap by moving beyond object-centred conservation paradigms. We opened up to cross-disciplinary and adaptive practices that respond to diverse contextual environmental, socio-economic, or political challenges. We found that heritage cannot be a stable or universal concept but must be continuously redefined in dialogue with evolving community needs, values, and aspirations. Global economic trends, environmental pressures, digital innovation, and societal change all shape the conditions under which heritage can contribute to sustainability.

This reorientation reframes cultural heritage not as an end, but as a means to facilitate wider societal transformations. It shifts focus from preservation of sites to the lived experience of communities. As HUL itself notes, heritage management cannot succeed without considering how people interact, their motivations, and their capacity to adapt lifestyles and values in changing contexts³³. Planning, in this sense, becomes a dialogic and reflexive process for co-producing meaning and negotiating change.

Within transition studies, these processes may be interpreted as niche-level innovations, emergent practices at the margins of dominant regimes that challenge established ways of knowing, producing, and living³⁴. Heritage-led initiatives grounded in participation and local agency act as testing grounds for these innovations, producing experiential knowledge and contesting mainstream development logics. Their transformative potential lies not in standardisation or replication, but in their capacity to produce social innovation, by prototyping new imaginaries and institutional arrangements.

Cultural sustainability contributes substantially to this dynamic by privileging relational knowledge and emotional attachment to place. It encourages communities to imagine futures that are not only ecologically viable or economically efficient, but also socially equitable and culturally

³³ Cfr. UNESCO, *op. cit.*

³⁴ Cfr. G. PACE, *op. cit.*, 2021, p. 214.

meaningful. This is not a call for cultural essentialism, but for critical engagement with the ways people experience, narrate, and co-create their environments.

Findings from Underground4Value reinforce this reading. Across the 13 Living Labs, underground heritage was repurposed as an arena for civic experimentation, which supported identity-making, governance innovation, and spatial justice. These cases exemplified what we define as STP: grounded, adaptive, and value-driven processes that connect high-level sustainability agendas with lived realities. Rather than delivering fixed solutions, these practices supported locally attuned processes of change, shaped by diversity, co-production, and iterative learning.

Taken together, these insights suggest the need to move beyond prescriptive, one-size-fits-all planning frameworks. Sustainability transitions require open-ended, pluralistic approaches capable of embracing uncertainty and contestation. They ask planners, scholars, and policymakers to rethink their role, not as designers of static systems, but as facilitators of emergent, culturally resonant futures embedded in place and community.

Concluding remarks for a future of Hope

Across both the transatlantic case studies explored within the TREN D project and the heritage-led innovations experimented through Underground4Value, one lesson becomes unmistakably clear: sustainability transitions cannot be caused solely by technical capacity or policy compliance. They require deeper and more reflexive approaches that foreground culture, community, and care as critical ingredients of lasting transformation.

In comparing greenways and cohousing initiatives in the U.S. and Europe, we observe how diverse governance logics, institutional capacities, and cultural traditions shape not only the form, but the very *meaning* of sustainability. Whether driven by civic experimentation, market mechanisms, or long-standing policy frameworks, these projects show that place-based transitions are not just spatial interventions. They are sociocultural processes rooted in identity, trust, and shared aspirations. In this light, sustainability is reframed not as an outcome, but as an ongoing negotiation, a collective capacity to imagine, inhabit, and adapt resilient futures in context-sensitive ways.

This interpretive shift finds powerful resonance in the work conducted through Underground4Value. There, heritage became a living medium for transformation, less a repository of static memory than a dynamic vector of civic agency and innovation. Through Living Labs in different UBH sites, the STP framework was tested and refined as a tool for adaptive, participatory planning. These stories validated how cultural heritage, once activated and not than merely preserved, can anchor transitions in symbolic meaning, emotional investment, and local ownership.

The STP framework's emphasis on iterative learning, co-creation, and systemic awareness reveals a critical gap in mainstream sustainability frameworks: the underrepresentation of culture as both a means and an end. While paradigms like UNESCO's Historic Urban Landscape have taken important steps in integrating cultural dimensions, they often fall short in addressing the radical uncertainty, contestation, and plurality inherent in real-world transitions. Cultural sustainability, as evidenced in both TREnD and Underground4Value, requires more than safeguarding heritage assets. It demands redefining narratives, retooling institutions, and restoring public meaning-making in an increasingly complex world.

What emerges from this convergence is a powerful call to reimagine planning itself, not as a technocratic exercise, but as a reflexive, ethical, and imaginative practice. Planning, in this sense, must go beyond managing land or delivering infrastructure; it becomes a medium for constructing shared visions, negotiating values, and mobilising collective capabilities. It must grapple with diversity and contradiction, enable situated experimentation, and accept that transition is not linear, but dialectical, that is, propelled by feedback, friction, and fragile consensus.

This reorientation compels a reconsideration of the planner's role: no longer a distant expert solving problems from above, but a cultural mediator and institutional broker, nurturing the intangible conditions – trust, dialogue, empathy – that enable communities to transition with dignity and purpose. In our greenways and green neighbourhoods' cases, we see that successful sustainability does not emerge from universal models but from plural practices grounded in place, memory, and mutual care. Thus, the true promise of sustainability lies not in standardisation, but in its capacity for contextual resonance. It is not a masterplan, but a kaleidoscope of situated responses. It is not a checklist of targets, but a choreography of values. To reclaim sustainability as a meaningful concept, we must restore its cultural depth and civic potential. We must listen to the stories that

people tell about their places and recognise in those narratives the seeds of alternative futures, not only environmentally sound or economically viable, but also socially just and culturally fulfilling.

In the end, there can be no hope without a plan, but also no plan without hope. And hope, as these cases demonstrate, is not naïve optimism. It is a practice of co-creation, imagination, and sustained engagement. It is what allows communities to move forward together not with routines but with a continuous dialogue. Not toward a predetermined destination, but toward a shared, evolving horizon.