TEH: Building a Cultural Regeneration Project for Europe

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Colophon

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FOREWORD: "(RE)BUILDING TO LAST" WITHIN "NEW CLIMATES"

To build is to destroy states architecture scholar Charlotte Malterre-Barthes (Malterre-Barthes, 2024) in her recent advocacy for a Global Moratorium on New Construction. Under her analysis, architectural practices need to radically move away from well-established extractive and exploitative practices (and economies) that have intensely shaped the profession since decades and are today undergoing a profound crisis. For Malterre-Barthes, architecture needs to be profoundly reinvented through a new culture and economy of "care"; a culture entailing practices of continuous maintenance, repair, and self-repair of the built environment and of the social/ecological populations that inhabit them (Malterre-Barthes, 2023). A politics of "repair" and "self-repair" extending to architectural and urban disciplines with the ambition of transforming –in depth– a sector in deep crisis. From Stephen Cairns and Jane M Jacobs' provocation that Buildings must die (Cairns et al., 2014) to ROTOR's co-funder Lionel Devlieger argument for a need to rediscover the Art of Deconstruction (Devlieger, 2019), we could also argue that "to deconstruct" (rather than destroy) is "to (re)build" or, rather should be. In other words, one should not be allowed to demolish existing built infrastructures (a spatial capital, a valuable stock) without a clear vision of what this entails in terms of grey energy and reuse potential, without a comprehensive strategy for both the future of the building and the outcomes of eventual demolition.

Within such an extensive debate a concern clearly emerges, we need to reexplore and update an ancient and often lost culture of continuous care and repair for what we inhabit, to systematically reuse architectural, urban, and territorial infrastructures when they eventually reach the end of a lifecycle.

Within a related logic, as the COVID crisis hit Europe in March 2020, Bruno Latour highlighted that "if everything is stopped, everything can be questioned, bent, selected, sorted, interrupted for good" (Latour, 2020). Such an important interruption of both our daily lives and the usual globalized flows has been a key moment to investigate alternative futures and question—on wider scales—one of the most polluting industries in the world¹. Even if the costly pause offered by the pandemic to question our societal models did not bear the fruits advocated by Latour—nonetheless—critical questions

 $\label{eq:construction} 1 \qquad \qquad \text{The European Commission (EU, 2024) estimates that the construction sector is responsible for over 35\% of the EU's total waste generation and contributes to up to 12% of total national greenhouse gas emissions.}$

about the profession become increasingly insistent and widely documented.

The decisive decade

All the while, the environmental crisis appears front and centre of most public and non-profit agendas around the world in various shapes and forms. In 2019, the European Union launched the "Green Deal" (European Commission, 2021) amidst its "Europe Roadmap 2050" (European Union, 2050), aiming to bring the continent to carbon neutrality under the next 30 years. In the United States, the White House launched in 2021 its "Long Term Strategy" (US Department of State, US EOP 2021), envisioning a future for the country which centres carbon emissions, environmental protection and both the energy and climate crisis. Along the current environmental, social, and economic crisis, several observers consider the next decade as decisive for the future of our planet² stressing that "10 years are all that remain to avert catastrophe".

At intermediate and local scales, such plans and environmental concerns find direct or indirect echoes in the current investigations many major European metropolises lead about their future and visioning to the likes of "Le Grand Pari(s) de l'Agglomération Parisienne" (Région d'île-de-France, 2016), "Bruxelles 2040" (Région de Bruxelles-Capitale, 2021), "Visions Prospectives pour le Grand Genève" (Frochaux, 2021) or "Luxembourg in transition" (Gouvernement du grand-Duché de Luxembourg, 2023). This opens to possible comparisons among different cases - metropolitan areas share similar problems - but also highlights the extreme variety of metropolitan spaces requiring tailor-made strategies, fully rooted in geographic, climatic, cultural and economic contexts. Among the common issues of great concern, in relation to the ecological social and economic transition in Europe, is the abundance of postindustrial sites and the absence of wide-scale territorial strategies to address their transformation (Sediri et al., 2021). Resulting from intense and transformative industrial ages, such "vestiges" without a project cover today large swaths of land within all Europe (Magnette, 2023). Often extending over large-scale polluted and densely inhabited territories, these spaces present important challenges that —only very recently— have started to be at the centre of strategic planning concerns. In continuity with the extractive rationality that have created them in the first place, these spaces are often left abandoned until their land value has grown enough to offset the cost of their dismantlement, depollution, and reconstruction as well as to produce sufficient profit for investors.

Given the current discussions and concerns expressed both by public actors and scholars about such practises (and the urgency to operate major changes in the next decade) concrete examples are needed of

 $\label{eq:local_problem} 2 \qquad \qquad \text{United Nations High-level Meeting on Climate and Sustainable Development (2019)}.$

what alternatives to the usual resource-abusive architectural and urban developments could look like (their potentials and limits). Through a collaborative effort3, the "Rebuilding to Last" project attempts to do so by documenting the capacity of independent Cultural Centres to address the regenerative future of their buildings and communities within the context of a specific, long-lasting European network of grassroots organizations. This publication, through multiple collaborative investigations on the activity of the Trans Europe Halles (TEH) Network and its members, aims to underline the capacity and limits of inspiring, fore running sustainable transformation practices for what they can teach us for future operations among cultural teams, audiences and communities, cities and beyond. The ways and strategies through which the TEH Cultural Centres have invested, repurposed and cared for neglected industrial buildings/ infrastructures all over Europe since the 1980's, constitute an important deposit of local experimentations from which alternative, non-extractive and community-focused ways to adapt, inhabit and transform our built environment could be learned.

 $^{{\}footnotesize 3} \qquad \qquad \text{The RTL project is a Trans Europe Halles initiative, led by } \\ \text{TEH in collaboration with an extremely broad number of international partners. The } \\ \text{project has been funded by the European Commission.} \\$





URBAN&TERRITORIAL REGENERA-TION THROUGH CULTURAL TRANSFOR-MATION PROCESSES

1.1 What is -and isn't-Cultural Regeneration?

Amidst the identification, throughout the last decades, for new ways to develop western cities in a more sustainable manner, the cultural economy has been identified -by many- as a key element. « Cultural » or « creative » cities have indeed been the center of a rising number of urban research reports, publications, and policies (Scott, 2010). Richard Florida (Florida, 2002) has famously observed the rise of a « creative class » in North American cities overtaking previously working-class neighborhoods while Ruth Glass (Glass, 1964) had already coined the term « gentrification » to describe the way artists, architects, and cultural workers -in general- had eventually, albeit not necessarily voluntarily, participated to the mutations of specific neighborhoods in London, to the detriment of their historical, lower-class inhabitants.

The economic, social, and spatial potential of this type of culture-based urban transformations has -since- been actively mobilized by politicians, publics administrations and urbanists alike throughout Europe and Northern America. An extensively studied dynamic in the context of major urban centers, especially to understand the specificities of large gentrification processes as in the cases of Paris (Clerval, 2010; 2011; 2022), London (Atkinson, 2000; Reades et al., 2022) or New York (Lees, 2003; Newman, 2006; Hipolito, 2019), to name a few. However, since the early 2000's, culture-based transformation processes seem to have found a particularly fertile environment in the context of struggling post-industrial territories1. Centers which have gone through an important rise in their population poverty, unemployment, and the departure of their upper and middle-class inhabitants, eventually leading, in the direst cases, to public finance bankruptcies, « shrinking cities » (Pallagst 2009, Wolff et al. 2017) or urban shutdowns².

Culture-based transformation has been increasingly mobilized in such contexts as an attempt to redevelop attractivity and strengthen local economies, with varying successes. An often-cited major example is the 1997 redevelopment of Bilbao around Frank Gehry's iconic Guggenheim Museum. When journalist Robert Hugues coined the term "Bilbao effect" in 2001 (Spaid, 2023), he was pointing at the way the struggling post-industrial context of the secondary Portuguese harbor-town had considerably benefited from the construction of the museum, from its acclaimed architecture as well as from the important culture and tourism-centric urban development of the surrounding neighborhoods. Since its post-industrial decline, Bilbao is an important attractive economic and cultural center in Portugal and Europe which can be attributed -at least in part- to such culture-centered transformation³. Given the mediatic appeal of the "Bilbao effect", other post-industrial cities through the western world have tried to follow the same path, structuring their transformations through iconic architectures, cultural infrastructures, and/ or major cultural events. Those include -for example- Santiago Calatrava's Quadracci Pavillion (2001, Milwaukee - USA), Jean Blaise's « Voyage à Nantes » (2011, Nantes - France) (Brahy 2019), Kengo Kuma's Dundee's "V&A Museum" (2018, UK) or Frank Gehry's "Luma Tower" (2021, Arles - France).

While this rising trend in urban transformation processes has been increasingly studied, the process we intend addressing with this research concerns a radically different dynamic: secondary, less visible, community-based type of cultural urban renewal at work in western cities. Such dynamics take equally place in secondary, post-industrial cities, but tend to emerge less within private or institutional initiatives and more within civil society leaderships (ie. citizen or inhabitants pressure groups, collectives, nonprofits etc.). They also (interestingly) share the particularity of centering their actions on the re-use and repurposing of existing, often industrial, and abandoned sites/infrastructures. Such initiatives generally benefit from few economical means but strong visions, extensively supported by local communities, know-hows and volunteer workforce among the ranks of the collectives in presence. While these projects vary in size, intents, and type of sites, they all rely on culture, creation, and art as means to transform and occupy abandoned spaces in a distinctive fashion from the more conventional dynamic previously described. Therefore, despite their differences, we consider such initiatives as all participating to a general, distinctive dynamic that we will call "Cultural Regeneration". A process brought to the fore also by French architectural collective "Encore Heureux" within the 16th Venice Architecture Biennale (Encore Heureux, 2018). As

 $[\]label{eq:context} \begin{tabular}{ll} The context of the economic globalization and related deindustrialization of the West has indeed led a vast number of secondary European and North American cities to an important economic crisis and difficulties to reinvent themselves since -at least- the early 1980's. \end{tabular}$

² See for example the striking case of Empire, Nevada, a US Gypsum company town which inhabitants were delocalized and ZIP code discontinued in 2011 following the closing of the local mine. (REF)

It is to be noted that, since the propagation of the so-called « Bilbao effect », various scholars have observed that the renewal of the city can't be solely attributed to the Guggheim museum or even to the sole urban development, but needs to be observed through the scope of a more general development of the area at the time. This also explains the difficulties encountered to replicate the full extent of this « Bilbao effect » in other cities through Europe. (Rybezynski 2008, Lorente 2023). Well before this propagation, Gomez (1998) already noted how Bilbao urban policymakers were at the time taking inspiration from the development of Glasgow while in both case failing to strengthen employement numbers

they present it, formerly abandoned spaces are appropriated by local communities within "an acceptance of the unexpected in order to construct the possibilities of the future" and participate to "embody and expand the very idea of culture" (Ibid.). Through continuous efforts and incremental innovations, such communities reinvest spaces while reinventing themselves as well⁴.

While the previously mentioned culture-based transformations mainly use cultural and artistic practices as a mean to improve local attractivity at the global, national, or international scale, "Cultural Regeneration" initiatives tend to actively produce and use arts and culture to maintain and strengthen local communities with minor concern for economical attractivity. While this doesn't exclude capitalistic rentability and cost-and-outcomes focused practices and concerns, these initiatives tend to focus on producing free or affordable spaces and services and offer opportunities for communities, artists, and cultural practices to thrive, with some degrees of detachment to more conventional rentabilities contexts.

Urban and architectural strategies also differ substantially. While conventional cultural transformation processes use vast demolition and construction operations/resources to implement large scale cultural events (ie. festivals, concerts, ...), "Cultural Regeneration" initiatives focus more on progressive adaptation, programming, and repurposing of existing buildings/sites, usually driven by (if only and simply because of the lack of means and the necessary frugality of the approach) a strong attention to embedded local, historical, and socio-cultural values.

Another distinctive feature of "Cultural Regeneration" initiatives can be addressed through the usually more horizontal and bottom-up organization of their actions. While conventional culture-based urban projects have commonly been structured by one or few private and/or public organizations commissioning experts which, in turn, hire contractors, "Cultural Regeneration" initiatives emerge from more local and independent initiatives and groups of individuals who invest their own time, energy, skills and sometimes money towards the progressive transformation of their environment. Given the profiles of such individuals (artists, cultural workers, local inhabitants, activists...), those types of transformation are perceived and led as cultural projects in themselves, embedding community-building and artistic activities through the entire process. In turn, this community-based approach allows for innovation and intense creativity both in terms of spatial and social practices and concepts. This allows to take into consideration planning aspects that conventional practices tend to ignore or downplay such as urban spontaneity and hacktivism, continuous prototyping and testing of spaces configurations, inclusive, 'parasitic' and temporary architectures etc. (Institute for X, 2015).

In a more general manner, the practices we identify as participat-

ing to a "Cultural Regeneration" of the built environment tend to invert the conventional development logics to which post-industrial sites have been subject to. Conventionally, those spaces, when redeveloped, have benefited from large economical means, coming from partnerships between private and public actors of various scales (e.g. local and national government, European funds, multi-national companies ...) (Ozden, 2012; UNIDO, 2018; Václavíková, 2019). Those, in turn, tend to set strict time frames, limiting the possibility for long-term reflections, on-site tests, the integration of unforeseen contingencies, and wider cultural or conceptual investments concerning the development project's content/aims as their adequacy with local resources, needs and imagery. They have also been subject to criticisms given the fragility of such partnerships (EuroDAD, 2022). In the context of "Cultural Regeneration" processes, the initiatives we study invert the logic: while benefitting from limited and often punctual economic means, the involved actors compensate this condition by a further investment in conceptual/creative work and a long-term investment of abundant, motivated, and mostly volunteer-based workforce on site. Such circumstances create a context of urban transformation different from what policymakers and urban planners are accustomed to and which we intend to better understand through this publication (and the nexts). In that sense, they can be compared to what David Harvey identified as « spaces of hope » (Harvey, 2001) in the pursue of an alternative to the conventional and capitalistic production of the urban environment.

Given such particularities, and the relative lack of large-scale and systematic studies on the subject, "Cultural Regeneration" initiatives require a more in-depth and extensive understanding. However, one should not mistake this need and interest for a limitless praise of those initiatives. This publication aims to describe a current, specific phenomenon which has distinctive potentials and outcomes, but also limits and risks. Several scholars and research have described (Gonzalez, 2013; Guadiana, 2013; Pratt, 2018) how post-industrial sites and territories crossed by culture-based transformations, even when partly developed by civil society members, could equally become vectors of gentrification. In this frame for example, Luca Pattaroni (EPFL) argues that they participate to an « aesthetical aternativisation of urban space » (Pattaroni, 2020). This is to say that -in certain conditions- such milieux slowly become commodified spaces expected to be "present, accessible, and consumable" in any major urban center and -thus- losing part of their "subversive power". Following Fran Tonkiss analysis (Tonkiss, 2013), we could also point out that such initiatives, laying less on public spending and more on voluntary (free) workforce from civil society members, participate to the construction of a general « austerity urban planning » logic where public investments become increasingly scarce, leading public services (their cost, and responsibilities) to be more and more taken in charge by non-profits organizations or private actors. This phenomenon is significant of the furthering of western societies' neoliberalisation and, as such, can't be unequivocally acclaimed without taking

⁴ See, for example, experiences such as Marseille's "Belle de Mai", Paris' "Grands Voisins" or Arennes' "Hotel Pasteur".

in consideration the more general logic of unravelling of the welfare state they emerge from. While our interest for "Cultural Regeneration" processes and initiatives comes from a place of conviction that those speak of our time and can bring to the fore innovative strategies and practices for the contemporary transformation of the post-industrial built environment, one cannot do the economy of legitimate concerns and criticisms towards the way some may, at time, participate to further the conventional forms of labor and natural resources exploitation under the attempt of paradigmatic changes. If we intend to learn and further develop such practices for the project of "transition", both their potentials and limits —in our context of urgency and crisis—must be addressed.

1.2 The New European Bauhaus (NEB) Challenge

The interest of the described research focus is further strengthened by the renewed interest of European politics for adaptative and innovative practices of the built environment. In 2021, The European Commission has adopted a Communication setting out the concept of the « New European Bauhaus »⁵ (NEB) aiming —among other— to propel initiatives of adaptation and transformation of the existing built environment (CIRECCE, 2021). This initiative has been adopted following the 2019 "Green Deal" declaration, a European Union policy setting Europe to become the first carbon neutral continent. The Green Deal aims to reach a "a fair and prosperous society benefiting from a modern economy, an efficient and competitive use of its resource and a net absence of carbon emission by 2050 in which economic growth will be dissociated from the exploitation of resources" (COM 640 final, 2019). The European Green Deal is a road map establishing a series of policy initiatives to reach the carbon neutrality goal and answer to the daunting environmental stakes we're facing. The explicit goal to decouple growth

 $[\]begin{array}{ll} 6 & \text{The current goal has been set to a reduction of at least } 55\% \\ \text{of all carbon emission by } 2030, \text{compared to } 1990 \text{ levels, through the adoption of } \\ \text{climate, energy, transport and taxation policies. (EC, 2023)} \end{array}$



⁵ The NEB was announced by Von Leyden in the 2020 State of the Union. The initiative was subsequently adopted by the European Commission as a communication on 15 September 2021 (CIRECCE, 2021)

from exploitative practices needs to be understood as unprecedentedly ambitious for the Union. This indeed signifies a considerable "paradigm shift" in which economy cannot, under any circumstance, supersede natural systems' and local communities' well-being.

Given its considerable ambitions, the European Green Deal was given the New European Bauhaus as tailored initiative aiming at implementing this cultural shift within the Union's territory, within our daily life and spaces by developing its cultural and creative dimensions. As Von der Leyen stated: "The New European Bauhaus combines the big vision of the European Green Deal with tangible change on the ground. Change that improves our daily life and that people can touch and feel - in buildings, in public spaces, but also in fashion or furniture". The New European Bauhaus aims at creating a new lifestyle that matches sustainability with good design, that needs less carbon and that is inclusive and affordable for all. In other words, through the furthering of policies and instruments revised or developed within the Green Deal⁷, the NEB attempts to translate them in

tangible forms. It aims at contributing to the development of new ways of building and inhabiting for the decades to come in Europe, in line with its titular reinterpretation of the infamous Bauhaus movement. As German physicist and climatologist Hans Joachim Schellnhuber stated about this initiative: "we have to develop a new world order. And in the focus of this order will be the built environment because this is where the energy goes, where the material flows go, where the emissions come from, where we are consuming our land. Thus, if we can transform the built environment then we can transform our society into something that will live and flourish for the next millions of years."

such as the Emissions Trading System or the Energy Taxation Directive, with close look at tax exemptions (aviation, shipping), the "Farm to Fork" strategy aiming at supporting sustainbale efforts in the European agricultural sector, the European Climate Pact, a collaborative platform of European stakeholders which, by adhering to it, set themselves to contribute to concrete and measurable sustainable changes in their organizations, as well as the EU forst strategy supporting forest preservation, restoration and afforestation in Europe.

8 As pronounced during the 18th Architectural Biennale of Venice collateral event, New European Bauhaus: radical yet possible future space solutions. 25-26 May 2023, Venice. Online: https://www.youtube.com/watch?v=l-J0gEcpF8cs&ab_channel=Universit%C3%A0IuavdiVenezia

7 This includes revisions of climate-related policy instruments













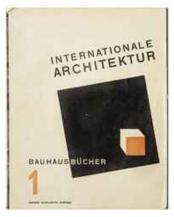












While its content and structure remain "in progress", a variety of interconnected tools and programs are already part of the NEB. Some take the form of networking and experimenting initiatives (NEB Lab⁹, NEB supporters' network, ...), other of direct rewards and funding (NEB prizes, NEB Rising Stars, open calls ...), guidelines and toolboxes. Among those, the NEB Compass¹⁰ constitutes the main 'guiding framework' for stakeholders and makers of all kinds. While constituting a basis for a NEB (self) assessment of projects, it establishes values and principles and defines the goals pursued within the cultural and physical transformation of the built environment¹¹. Three ambition levels, from what constitutes an "acceptably" NEB project to what is an "ideal" project are developed. While the first two ambition levels remain somewhat conventional, if still relevant for an actual ecological transition, the third level marks an important change by centering itself on transformative practices and thus fully embodying the Green Deal goal to enforce a deep paradigm shift from exploitative to regenerative practices. This level -which particularly relates to this research project—calls for (1) long-term structural dynamics, (2) the integration of the natural ecosystems' logic and (3) the implementation of societal transformation through behavior and lifestyle changes¹². While such transformative practices are to be seen on both spatial and social levels, the urban, landscape and architectural project is considered capable to contribute to longterm and structural socio-spatial changes.

Contrarily to the other levels, the third one (interestingly) does not call for an improvement or added layer of efficiency to the built stock but rather for a structural change. Under those circumstances, the radical, long-lasting and far-reaching experience of "Cultural Regeneration" practices developed by the TEH network appears particularly relevant, a valuable capital to be exploited. The more than 100 members of the network have been experimenting day after day for the last 40 years situated and built alternatives to the mainstream, exploitative practices that have —until now— dominated the field of architecture and urban planning.

Local interconnected initiatives have already been identified as key for the development of the NEB. In its 2022 workshop, the "European Committee of the Regions" has established the EU local and regional authorities (municipalities, regional governing bodies ...) as key stakeholders for sustainable urban, regional, and cultural NEB policies due to their direct impact on a vast number of public buildings and spaces as well as their important regulatory and funding role in the renovation of the built capital and the regeneration of spaces. In this context, local and regional elected representatives have been stated as « pivotal when it comes to making the New European Bauhaus more accessible and engaging members of the public in the transformation process in order to advance its implementation. » (ECR-SEDEC, 2022). NEB is also clearly presented as a wide-reaching and geographically spread project: « As a truly European project, the new Bauhaus must be conceived as an interconnected network of regional or local hubs rather than just a single geographical outpost. It is through these local and regional hubs that further connections to industry, academia, civil society, urban entrepreneurship, and the arts could be built. » (ibid.). 13 The regional relevancy of NEB is not necessarily limited to institutional initiatives. Many grassroots initiatives have been called upon to further define what the NEB is¹⁴.

In this frame, Trans Europe Halles, as an important network of long-lasting, fore running "Cultural Regeneration" initiatives, can both be seen as a **precursor of the NEB** and an ensemble of applied experimentations from which NEB initiatives could learn and grow.

Old & New Bauhaus

A little over a century ago, the Bauhaus movement saw the light of day amidst a society facing deep crisis and uncertainty following the shocks of the first world war and of the two first industrial revolutions. European societies were facing a need for new, innovative perspectives for the future, having at the same time widely opened the realms of their technical possibilities. New materials, techniques, production processes and resources resulting from the industrial eras, the war and colonial trades laid ground for what was going to be a major cultural change across the world.

In this context, the Bauhaus art school (literally meaning "the house of construction") was founded by Walter Gropius in 1919 with the ambition of fully reorganizing how arts could be conceived and taught. This reorganization was first built upon a Manifesto calling

⁹ The NEB Lab is described as "a 'think and do tank' [set] to co-create, prototype and test new tools, solutions and policy recommendations. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_4626

 $^{10\,}$ The Compass establishes three core values and three working principles; all NEB projects shall be "beautiful", "sustainable" and bring people "together", on one part and, on the other, develop a "transdisciplinary approach", a "multi-level engagement" and a "participatory process".

 $^{11\,}$ The NEB (self)-assessment tools aim explicitly is to "add granularity to this framework and introduce specific lists of measurable criteria for specific types of projects" (NEB 2022, p. 4) and to help stakeholders, through a series of comprehensive, open questions to further projects in the direction of the aesthetical, inclusive and sustainable goals of NEB.

This level of assessment is expressed to a variety of evocative questions such as "Can participants question and reimagine their way of life through the project?", "Is there an understanding of the inner working of a (natural) ecosystem that could restore the landscape or biodiversity?" or "Is there a vision on societal change by behavioral change or a mention of a paradigm shift?".

 $^{13 \}hspace{1cm} It is through this scope that one can understand the recent apparition of various local and regional initiatives found under the overarching term of a « New regional Bauhaus ». Starting in the 2021 Summer, the so-called « NEB of the mountains » has gathered several local and regional actors around the regeneration of the South Tyrol Euregio and the city of Bolzano . In the same vein, the dutch city of Heerlen and the german Aachen have developed a similar dynamic in their euregional collaboration, bringing together local universities and practitioners in defining what a local NEB might entail in terms of opportunities and territorial planning. In a more national context, another example can be cited as the way Lille European Metropolis and the Hauts-de-France region have seized and developed the NEB principle in northern France .$

 $[\]frac{14}{\text{ouregionsweek-2023-stimulating-local-and-regional-new-european-bauhaus-grass-roots-projects}}$

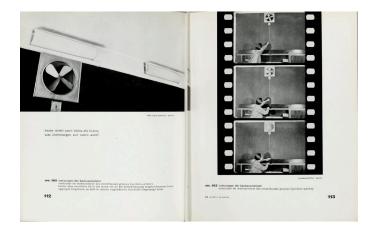
for the dismantling of the barriers between arts and crafts, creativity, and production¹⁵. Beyond the philosophical stance, Gropius and the Bauhaus school laid the basis for an integration of artistic and craft practices within the emerging systems of industrial mass production hands in hands with a collectivist and social philosophy¹⁶. While this shift had to integrate the notion of standardization and norms required by the mass production system, Gropius insisted that arts and crafts needed to evolve beyond those sole concepts to really become modern. While the Bauhaus school only lasted for fourteen years, its philosophy, teachings, and protagonists quickly became central to one of the most important cultural and spatial transformations of the last centuries. It is fair to say that the modernist movement -as a whole- has been considerably fuelled and structured by such teachings and practices and that the majority of our current living standards have been shaped -in one way or another- by the Bauhaus. From the ready-to-wear clothing sector to prefabricated housing units as well as Ikea-style mass-produced furniture -results of this cultural shiftare still visible to this day, as well as its negative consequences¹⁷.

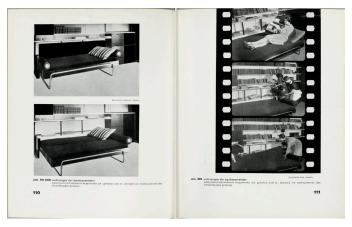
Today, within a new crisis and turning point, the call for a new Bauhaus must be taken for its capacity of implementing a radical societal shift in a small amount of time and with limited means. In this frame, the long-term, situated experiments of the Trans Europe Halles network —as an « alliance of the arts » per se and through the creative, adaptative, reuse of the "ruins" of our past- seem a promising germ to conceive the next paradigm shift beyond extractive and functionalist principles and towards "care based" and "alter-functionalist" 18 ones. In contrast to the Bauhaus functionalism, the alter functionalist approach where « every element fills several functions, every function is filled by several elements » address the ecological transition through constant, continuous, evolving actions on the ordinary rather than exceptional, punctual and intensive implementations. In this frame, transition "cannot be exhaustively planned but must preserve spaces of freedom where certain practises and transitory uses can be implemented through time and according to inhabitants'

- Gropius aimed at bringing back together the hand and the mind, the artist and the workshop with no disciplinary distinction; all workers involved in architecture, sculpture and painting were supposed to join in service of a $20^{\rm th}$ century lifestyle, under re-definition.
- 16 Gropius shared Le Corbusier observation of a 19th century « machinist revolution » which had to be followed by a deep intellectual shift.
- $17 \hspace{1cm} Indeed, while the Bauhaus teachings were rooted in a call for industrial rationalization and a social conception of mass access to living standards and goods, it also widely participated to a progressive standardization of lifestyles and living environments, to the fragilization of local cultures, crafts, habits and the gradual depletion and exhaustion of the environment. \\$

needs" (Mongé, Apaar, 2021) and must centre principles of reversibility, multifunctionality and co-construction already found in the natural ecosystems.

As the New European Bauhaus ultimately call for a paradigm shift, TEH concrete experimentations could bring us important knowledge on how to deploy new prototypes at the European scale, taking our inspiration from the Bauhaus for its capacity for large-scale cultural change implementation while moving away from some of its more exploitative foundations.





Walter Gropius (1925). Internationale Architektur. Bauhausbücher 1, München

1.3 Beyond obsolescence: towards a project of Cultural Regeneration

While having resulted in the building of vast settlements, roads, railways, and infrastructures, increasingly extending its inhabitability, the rapid territorial development of the last century has -at the same time- dangerously eroded and fragmented Europe's landscape. In the light of official scenarios and measures on Climate Change¹, on energy consumption², on quantitative and qualitative protection of the land³, a complementary, more comprehensive, and forward-looking understanding of the evolution of urban space might open up innovative and more resilient pathways to deal with urban growth and/ or contraction4 and face future challenges. In recent years, international research initiatives have proposed innovative reflections and strategies concerning our urban future. Projects as "Les Nouveaux Cahiers de Doléance" (Latour 2019) –for example– launched by renowned French sociologist and anthropologist Bruno Latour and Medialab or Charlotte Maltherre Barthes' "Moratorium on New Construction" (2024), remind us of the importance that, in times of deep (socio-ecological) change, unconventional research and design efforts have in (radically) calling into question classical representations and in reconstructing collective imaginaries. Within "Carbon-neutral" or "zero artificialization" fundamental goals, the systematic reuse and "recycling" of our existing built capital appears today to be one of the rare concrete and accessible strategies able to reach such ambitious goals.

The European "City-Territory" as Renewable Resource, a research hypothesis on future "Urban Europe"

In this frame and within the "Rebuilding to Last" Research Project concerning Cultural Centres' capacity of addressing the future of their built/non-built/social environments through innovative and inspiring transformation processes, we propose to work on the hypothesis of the "European City-Territory as Renewable Re-

source" where reuse/recycling/reinvestment reverses the idea that urbanization is just a process of waste and considers it, instead, as an accumulation, a "stock" and a reservoir of embodied energy6: a precious and strategic spatial and natural capital. Within this hypothesis, future challenges (demographic, energetic, environmental, at large) are taken into account in the context of the European City-Territory as a long-term distributed and decentralized infrastructural, territorial construction. This entails a project able to recover and leverage on the various forms of inhabitability and their relations with the infrastructural support, reflecting on new life cycles and innovation, capitalizing on the urban and territorial embodied energy, and rethinking, without denying it, Europe's extensive and diffused fixed capital (its "built" stock). The belief is that -within the dense sedimentation of rationalization at work or abandonedthe "City-Territory" already contains the potential to "regenerate" itself7.

Such hypothesis can be referred to different bodies of scientific research, integrating urban, technological, and environmental thinking. Urban metabolism and circular economy (Braungart and McDonough, 2002; Gemeente Rotterdam et al., 2014), life-cycle assessment (Manzini et al., 2008), embodied energy evaluation (Stein et al., 1978), eco-system services and co-evolution theories (Alberti, 2016) merge with spatial and social analysis to reconfigure an approach to urban-natural dynamics. While the idea of the "city as a resource" has a long tradition (Jacobs, 1961), it has only been explicitly utilized since the 1920s when, in the North American context, the idea of "nature preservation" was expanded to also consider the "urban resource". It was precisely starting from the idea of the "life cycle" that, between the 1920s and the 40s, planners and real estate experts (in the U.S.) expanded the idea of "resource" to the urban space. The idea of preserving the "urban resource", in the same way that forests and rivers are preserved, naturalizes the urban phenomenon but represents – at the same time - an essential passage into technological research and urban policies.

In response to the current crises of the urban environment, the European "City-Territory as Renewable Resource" hypothesis considers space as a "capital", a valuable asset, a stock (Lévy and Lussault, 2003; Calafati, 2000). Through the concept of "embodied energy", attention centres on the urban and the territorial support, where concluding or concluded urban and territorial cycles (typical of urban crises/turning points) are looked upon as open for agents to

 $[\]label{eq:local_continuity} 1 \qquad \qquad \text{See for example the Intergovernmental Panel on Climate} \\ \text{Change Climate Change 2014 Report (IPCC 2014) or the EU Climate Adaptation} \\ \text{Strategy (European Commission 2021)}.$

² See for example the Swiss 2000-Watt Society Scenario (Morosini 2018) or the négaWatt's CLEVER (Collaborative Low-Energy Vision for the European Region) scenario (négaWatt Association 2023) or the EU Reference Scenario 2020 (European Commission 2021).

 $^{3\,}$ See for example the No Net Land Take by 2050 proposals (Build Europe 2022) or the EU Soil Strategy for 2030 (European Commission 2021).

 $[\]label{eq:conding} 4 \qquad \qquad \text{According to the EUROPOP2023 report by EuroStat} \\ (2023), the Union's population is still set to grow for the next few years, peaking at 453 million people in 2026, before decreasing to 420 million by 2100 due to the combined effects of fertility levels decrease and climate change impacts, with Poland and Italy projected to lose the most population.$

⁵ This hypothesis has been developed by the author in collaboration with Paola Vigano also within the research project "Towards a new vision for Switzerland 2050" at EPFL/ LABU (2017).

With the aim of revising the paradigm according to which urbanization merely represents a process of waste, the "City-Territory as renewable resource" hypothesis investigates the capacity of a set of design strategies to recycle and upgrade the already available wealth of resources of the "City-Territory's" palimpsest.

⁷ Regeneration is here intended as a set of ambitious design strategies to improve the performances of what already exists.

reconfigure new cycles. What remains on the ground, the leftovers (e.g. materials, artefacts and infrastructures that have supported the formation of past cycles) are not a minor or marginal constituent of the possibility to open new, virtuous cycles. This hypothesis operates through the territory's embodied energy, aiming at reworking the existing urban and infrastructural "stock" (artificial and ecological) and at envisioning new lifecycles for abandoned and underused spaces. Today the evaluation of the embodied energy in the building stock has become part of any attempt to minimize energy consumption; this proposition moves beyond, addressing the question as multifold and trans-scalar. In this mind-set, expanding the purposes of the 2000 W Society Scenario⁸, the territory itself, and not only the "built stock", could be acknowledged as huge opportunity to accumulate/save energy. Besides efficiency, the strength and reversibility of infrastructures (ecological/artificial) will need to be taken into account via extensive retrofitting/upgrading processes9. Through this hypothesis, the project recovers and leverages the various forms of inhabitability and their relations with the infrastructural support, proposing to valorise and enhance, through a process of adaptation (spatial, social and technological), the transformation of architectural, urban and territorial space. An "increased habitability" of the territory also implies the search for new symbiotic relationships (virtuous co-habitation) between urban and ecosystem functions, and thus a specific interest in possible and multiple correlations/superimpositions between land-use and use of the land, in its physical qualities and in the ecosystem services it provides. A process which needs to be enhanced also through the development of new positive "images" and "imaginaries" (cultural and social representations) of land (Sippel, Visser 2021), soils (Blanc 2021) and places (Kunysz 2024).

Within and through this working hypothesis the Rebuilding to Last research project, (1) addresses the necessity of conceiving the European cities (and territories) as a "renewable resource" and (2) proposes to do so by valorising and capitalising on TEH Cultural Centres' long term and layered knowledge (developed through over 40 years) on the transformation of ex-industrial built and non-built space.

Towards a Project of "Deep Cultural Regeneration"

Different from other research hypotheses on urban re-cycling (Greenstein and Sungu-Eryilmaz, 2004), the "City-Territory as Renewable Resource" hypothesis extends the concepts of re-cy-

8 The 2000-Watt Society is a vision for a livable future. People in such a society care and stand up for a high quality of life that meets the goals of sustainability. They appreciate the resources the earth provides, use them sensibly and share them equally around the globe. People in a 2000-Watt Society know that quality of life is not inextricably tied to a constantly higher material standard of living. https://www.2000watt.swiss/english.html

cling and "regeneration" beyond brownfield recovery to all types of space: brown, grey and green-fields, all space that embodies labour and that needs to be adapted and improved. Regeneration -defined (in biology) as the faculty of « a living entity (genome, cell, organ, organism, ecosystem) to reconstitute itself after destruction or to reproduce parts of organs/tissues, following loss or renewal »- implies an organism's ability to renew itself autonomously, using its own internal resources (from what is "already there"). In this perspective and within the European city-territory, the regeneration and valorisation of the built and non-built environment as a global strategy offers the conditions for a project different from the past. It is a vision of territorial habitability and socio-economic development based on existing territorial qualities, which enhances an exceptionally rich territory with a heritage to be recognised and endowed with great flexibility. The aim is to regenerate and establish built and open spaces and landscapes as part of the ecological transition. Regeneration requires us to start from what is already there in order to build our vision for the future, and to make the most of and capitalise on the resources that are already there.

The diffuse, multi-scalar and multi-disciplinary nature of regeneration (which must deal with the whole of what already exists) requires a shift also in terms of governance. The architectural, urban and territorial projects of the future will have to be increasingly - and structurally - coordinated across the different skills, fields of action and stakeholders. We will need to take into account the complexity involved in setting up a widespread regeneration project, arming ourselves with the necessary skills and cross-disciplinary expertise, some of which have yet to be invented. The adjective 'deep' (after the philosopher Arnae Ness, who distinguishes 'classical' ecology with its anthropocentric roots - from 'deep' ecology, which implies a renewal of the relationship between man and nature) reminds us that the type of process we have in mind when we talk about architectural, urban and territorial 'regeneration' implies a structural (and not superficial) renewal of our way of conceiving, building and inhabiting the territory. Seen the strength of the cultural dimension within TEH members' transformation strategies, we will consider its approach as one of "Deep Cultural Regeneration".

⁹ In this perspective the City-Territory should work with and not against, the reinforcement of ecological systems.





TEH: A FIRST, OVERALL DESCRIPTION

2.1 Describing TEH

« In the European urban landscape of the end of the 20th century, many sites symbolic of an industrial, merchant and military age lost their "raison d'être" and fell into disuse, their memory set aside. "Industrial wastelands, eyesores, silent spaces" are words of absence that designate the brutal passage from one epoch to another, leaving neighbourhoods disfigured and people out of work (...) and yet they open unexpected perspective for use. Among these deserted places, some are being re-used and little by little, are finding new life. The issues at stake with regard to conversion join with those of the artists and cultural activists who wish to influence their culture and their time."

Fazette Bordage (Bordage et al. 2001)

Through these words, former Trans Europe Halles (TEH) coordinator Fazette Bordage describes the philosophy through which the network was born in 1985 under the impulse of Belgian theatre director Philippe Grombeer. This philosophy is still at the centre of the organization which, to this day, describes itself as a network "uniting 165 grassroots arts and culture centres with strong DIY, independent, community driven and alternative values, across more than 40 countries"; "support[ing] grassroots communities in their endeavours to reclaim abandoned spaces and transform them into vibrant hubs for arts and culture"; "regenerate[ing] communities, neighbourhoods and cities" and "promote[ing] social, environmental and spatial justice." (TEH 2024)

With over 160 members and associates spread across Europe and the world, TEH has considerably grown since its foundation, reaching the status of a well-established European cultural network. Given this size, various members of the network can have extremely different political, economic, geographical, and institutional contexts of actions and might differ in their goals and strategies. Such differences will be preliminarily analysed in the following pages. However, due to TEH membership policy, all members share common features which have overall remained the same since the foundation of the

network. To become a TEH member, organizations must at least¹:

- Be an independent centre formed through a non-profit legal status originating from a grassroots initiative
- Display a high quality, pluri-disciplinary and autonomous social and cultural program
- Support and defend a democratic and pluralist society
- Attest of a strong engagements towards equity, sustainability, diversity, and social justice
- -Encourage interaction between local and international art practices
- -Operate in a repurposed building

Such features allow for a variety of structures to join the network while still maintaining a coherence throughout the socially engaged and community-based cultural actions required by TEH. Given its growth in size and recognition, this membership policy does seem to have allowed to the network both a consistent longevity and the flexibility needed to face changing circumstances.

TEH' relevance has been recognized on several occasions by the European Union both through the results of the lobbying work of the network and through the (various) projects and development funds it was granted through the years. Moreover, several research projects have been led about and through TEH and the activities of its members. Some directly emerged from the members and team of the network, either as self-reflections on the development of the organization (Bordage, 2002), products of collaborations within their wider sector of activity (Fitzgerald, 2010) or as reports of projects funded by the European Commission, including "Changing Room -Mobility of Non-Artistic Cultural Professionals in Europe" (Laakso et al., 2010), "Engine Room", "Creative Lense" (Rex, Kaszynska, Kimbell 2019, Kimbell, Rhodes 2019) or "Factory of Imagination". Those also include a variety of handbooks and reflections on applied practices through the network such as "Managing Independent cultural centre. A reference manual" (Fitzgerald 2008), "Design handbook for cultural centres" (Lényi 2014) or "Volunteering in the European grassroots cultural scene" (Voorintholt, Wolfsberger & Sayin 2020).

Given their longevity, spread and activities, TEH and its members are also more and more featured in academic and market studies, such as Clément's "Manifesto of the Third Landscape" (Clément, 2003), Lucchini's "La mise en culture des friches industrielles" (Lucchini, 2016) or KEA and Deloitte new "Market analysis of the cultural and creative sectors in Europe" (2021). This shows, once again, the relevancy and importance of TEH in the field of urban renewal and regeneration, both in the literature and in the field. While such publications have all brought their fair share of both applied and

 $^{1 \\ \}text{Other criterions also involve being founded at least 2 years} \\ \text{prior membership application, to be based among one of 46 eligible countries and} \\ \text{display a strong motivation to actively engage with the network. Applicants who do not answer to one or several of those criterion may be eligible as associates.}$

theoretical knowledge, the "Rebuilding to Last" project, through its research dimension, aims at furthering this literature by focusing more precisely on a common, and relatively neglected feature: the mandatory occupation of (mainly industrial) repurposed buildings and its consequences. Far from a simply infrastructural issue, this required feature for all TEH members is arguably one of the most distinctive elements of the network. This also indicates the experience TEH members have accumulated since the 1980's on the more than ever pressing issue of circular architectural and urban practices. In this frame and through its almost 40 years of existence, the TEH network has developed a precious expertise on culture-based transformation of communities, neighbourhoods, and buildings. Far before the declaration of the New European Bauhaus, TEH was encouraging its members to reclaim abandoned buildings and (re)use them to "regenerate" local socio-cultural ecosystems through creative practices fostered by ecological and social concerns. As such, and as mentioned earlier, TEH can be considered a precursor of the NEB. This precursor status motivates even more the need for a thorough description of the network and the deployed strategies as to see "what can be learned from" four decades of active experimentations throughout Europe and how those might profit to the implementation and support of new initiatives.

To launch our first (tentative) description of the TEH network, we will first explore its circumstances in three introductory parts: first "Times of TEH" will be developed through an exploration of the history of the network, its birth and evolution in practices, philosophies, and structure. Secondly "Geographies of TEH" will be brushed upon by documenting the extent of the network diversity throughout Europe under different aspects. Through those, we'll display the relationships of the centres to European urbanization, landscape areas, climate zones and natural risks as well as their development in relation to shifting economic and political contexts. Such "geographies" will also allow to draft an "alternative portrait of Europe" featuring a new constellation of knowledge existing beyond the political borders of its member states. By illustrating a set of "geographies" through concrete examples, we'll also introduce the reader to a sample of the variety of centres composing the network. Finally, TEH will be further characterized through a first quantitative and comparative analysis of selected parameters featured within a survey developed for this research. Thereby we analyse critical elements to understand the variety and extent of "cultural regeneration strategies" developed by TEH members, including their distribution through European countries, the characters of their built assets (e.g. period of construction of the buildings they occupy, their typology, their main building materials), the form and ratio of their spaces (e.g. size and distribution of indoor/outdoor occupied areas) as well as first elements addressing the adaptation of their built assets to the energetical challenges (renewable energy strategies employed, state of the buildings insulation).

Through these three parts, we aim at building a first understanding of the TEH network which will allow to better grasp the circumstances which pervade the variety of cultural regeneration practices within TEH as they will be presented more precisely in the following publication.

2.2 Times and visions

The history of TEH can be explored from at least three points of view: (1) through the history of the many local initiatives composing the network, each with its unique story and set of circumstances, which collaborate to strengthen each other and share expertise, (2) through the evolution of the network itself as an organization with a set of principles and leaders which progressively changed through time and integrated more and more members, (3) through the way those two levels have integrated and answered to important and rapidly changing political and economic circumstances in Europe. This especially in terms of European conflicts, relationships and collaborations, the energy crisis (and the many forms it took since the 1970's) or the ever-growing ecological consciousness in Europe taking form into national and international policies for sustainability. These intertwined stories will help us understanding how and why TEH has grown so much both in number and relevancy in the last 40 years.

A blossoming vision

While TEH was founded in 1983, it drew from pre-existing initiatives throughout Europe which were already the product of their time. Melkweg, the oldest member of the network was founded in Amsterdam during the petroleum crisis and barely a year after the release of the Club of Rome's "Limits to Growth" (Meadows et al. 1972), one of the first important international reports advocating for sustainable ecological and economical practices to avoid reaching planetary limits and deplete its resources. The other TEH precursors saw their opening soon after. As mentioned in the previous section, at the time, many important (institutional) cultural centers were opening throughout Europe in brand new, iconic architectures conceived by leading designers and featuring mainstream cultural programs². Within this context, the choice of TEH precursors to invest existing, abandoned infrastructures for fostering arts and cultural practices can be seen as both a choice and a statement of their alternative, independent take on culture.

This choice needs however to be relativized by the economic and industrial context of the 1980's. Indeed, the decade also saw the consequences of the European de-industrialization and the emergence of neoliberal politics, marking in many European countries the beginning of a decrease of public investment in the cultural and artistic sectors. In this context, developing arts and culture in repurposed buildings also represents a pragmatic answer to fewer economical

means and a surplus of abandoned industrial infrastructures.

One of such initiatives was, in 1983, under the hands of Belgian cultural actor Philippe Grombeer as he was participating to the creation of an art center into Brussels' abandoned covered market, the Halles de Schaerbeek. Among his key participations to this endeavor has been to reach out to a set of similar existing initiatives in Europe. This set the spark for a fruitful collaboration with five pioneers of "cultural regeneration" practices: Huset (Copenhagen, Danemark); Kultur Fabrik (Coblence, Germany); Melkweg (Amsterdam, Netherlands); Ny Scen (Göteborg, Sweden); Pali Kao (Paris, France); Rote Fabrik (Zürich, Switzerland) and Le Confort Moderne (Poitiers, France)³. These centers, all connected to the cultural sector, had in common to « transform the city based on a past to which they did not turn their back but on which they lean on to ask new questions »4 (Clément, 2018). Since their emergence, architectural practices in these spaces took advantage of the history, past and identity of the places transformed in a way that the current NEB initiative has only started to address. The architectural project was not an answer to preestablished programs seeking a profitability of the built spaces but rather repeated attempts -through time- to adapt space to cultural practices, and cultural practices to spaces (within a recurrent movement).

Based on such commonalities, these precursors met in Brussels in 1983, to found the "Trans Europe Halles" network and set its philosophy and membership criterions. **Fazette Bordage** was one of the early members as the founder and representant of "Confort Moderne" (Poitiers) before she became coordinator of the network in 1993.

Within an interview realized for this research Bordage recounted her first meeting with TEH: "We were very few and, you know, when I arrived in a Rote Fabrik in summer 86 and met Philippe (Grombeer) from Halles de Schaerbeek, people from Melkweg, Koblenz, UFA... [...] I realized that 'Wow! What I'm doing is not crazy!' Because you know, at that time, we were so isolated"5. Indeed, TEH first was born as a place of mutual support for many isolated alternative initiatives throughout Europe. The network soon became recognized by its members as a family of sort, where one could learn from the experience of others and find resources to develop their own centers and overcome eventual struggles they were faced with. In Bordage's words, "at the beginning, the role of TEH was to give force to each other to keep going with our vision of culture and empowering people with their own creativity but at the same time helping in practical issues concerning eventual relocations, the state of the teams, the handling of security, etc.[...]"6

² Piano and Rogers' Pompidou Center (Paris) opened merely 10 years prior, Stirling and Wilford's Neue Staatsgalerie (Stuttgart) was designed in 1985 while Raue, Rollenhagen, Grossmann and Lindemann's Gasteig (Munich) opened the same year, for example while Gehry's Guggenheim (Bilbao) opened in 1997. Herzog & De Meuron's Tate Modern (London), possibly one of the most iconic and important institutional cultural reuse of an industrial building, only opened its doors in the Bankside Power Station in 2000, on a commission originally dated from 1994.

Pali Kao, Huset, Ny Scen have since then closed their doors.

⁵ Interview with Fazette Bordage, 9'15", 24/01/2024 - 91'30"

⁶ Ibid, 33'33"

This supportive environment was particularly important given the limited-to-inexistant public support and recognition brought to such alternative cultural initiatives at the time. As Fazette Bordage states (Encore Heureux 2018): « In 1983, when we were claiming that we had invested places of « industrial, port or commercial heritage », everybody was laughing at us among the territorial communities and the ministries. Technical, utilitarian building devoid of renowned architects could not belong to what was considered « heritage ». The notion of industrial heritage grew with us. »⁷ The cultural activities of the TEH centers were misunderstood by local authorities: "We were supporting each other because we had no other support. For example, in my city, Poitiers, my evenings were very often ending at the police station because they couldn't understand what was going on. Many young people gathering, things they would see nowhere else, etc."⁸

This lack of understanding and support was equally found on higher political levels, despite the extent of the network. The nascent European Union was indeed first and foremost developing through economic agreements and industrial policies, leaving no room for recognition of cultural initiatives to the likes of the TEH network. As such, TEH remained, for a time, in a role of a dissenter network of grassroots organizations struggling, together, to find public legitimacy and fundings.

Waves of expansion and contrasting perspectives

Three important circumstances contributed to change that situation: the extension of the European Union to the East, the development of European cultural programs and the rise of ecological consciousness throughout the continent.

First, after the Cold War met its end and the strict separation between Eastern and Western Europe disappeared in 1991, an important number of Eastern located centers were funded and/or joined the network. This contributed to a first increase in size and spread of the TEH as well as leading to encompass new contexts within the network, i.e. the post-soviet economic, socio-cultural and architectural circumstances.

This highlighted the strongly European mindset through which TEH was funded. As Fazette Bordage states about the beginnings of TEH: "We had a dream about Europe. It is something I shared a lot with Philippe [Grombeer] because we thought 'Europe is a young institution, so it will correct all that is wrong in our old local institutions.' We had the dream that within the European level, we'd invent ideal policies to bring people together which could then trickle down to each local situation. And -to be honest- at that time, it was so difficult

Original translation from « En 1983, dire qu'on avait investi des lieux du "patrimoine industriel, portuaire ou marchand" faisait rire tout le monde dans les collectivités territoriales et les ministères. Des bâtiments techniques utilitaires, sans architecte renommé, ne pouvaient appartenir au "patrimoine". La notion de patrimoine industriel a grandi avec nous. »

with our local policies and national policies, [...] we really felt that it would save us. We had the dream that this could be a new space to really live together."

This European hope was ingrained in many aspects of the network, including in the decision to regularly move the organization's office, originally located in Brussels, to various countries. In a way, the development of TEH to the East also foreshadowed the bettering of the EU relationships to the eastern European countries, a decade before their adhesion to the Union.

In parallel, TEH also benefitted from the development of European cultural programs as the network promptly applied to public calls as the European Commission initiated them. Through the "Kaleidoscope" program, the network secured a first grant in 1993, allowing the creation of the network's office and the hiring of their first cordinator in the person of Fazette Bordage. Through the 1993-1999 Kaleidoscope programme, Bordage eventually launched the "Phoenix project" in Copenhagen from 1994 to 1996. This major gathering brought together the TEH network with a variety of scholars, politicians, artists, cultural and social workers with the explicit goal to "position art and culture at the heart of exchange and dialogue between different components of European society"10 through the organization of workshops, conferences, and artistic events. The inclusion of a variety of international actors, including extra-European representatives coming from South America, Asia and Africa brought TEH to grow both in terms of international recognition and of numbers, as more members joined the network. As Fazette Bordage remembers: "That's how I was invited to Taiwan, Sao Paulo, Montreal, ... At the beginning I was very shy, because to me, it was not about setting a model. But it was fantastic [...] everybody understood what we were doing. [...] I could feel it was really the beginning of something that would develop and grow."11

Following this momentum, TEH was soon asked by the European Commission to participate in its pioneer European Voluntary Service project. The EVS project started a new strategy of international exchanges between the centers of the network of both youth and employees that has since then been at the center of TEH actions.

The growing consciousness of the ecological crisis in Europe has also slowly contributed to influence and modify the public eye on "reuse" 12 . While favoring the repurposing of existing, aging buildings has been seen as a marginal, somehow amusing attitude for most of the 20^{th} century, it is now more and more identified as an unavoidable and urgent strategy. As the Bruntlandt Report (WCED 1987) first stated the urgency of building sustainable societies on a global level

7

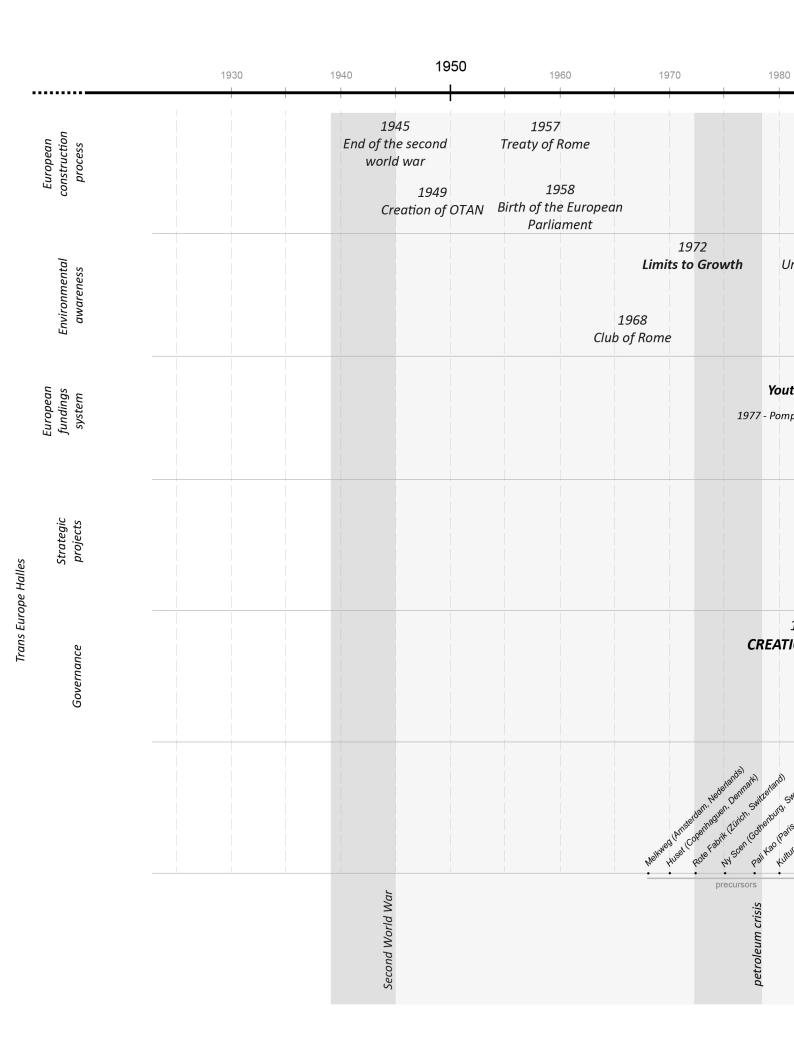
⁹ Ibid., 14'00'

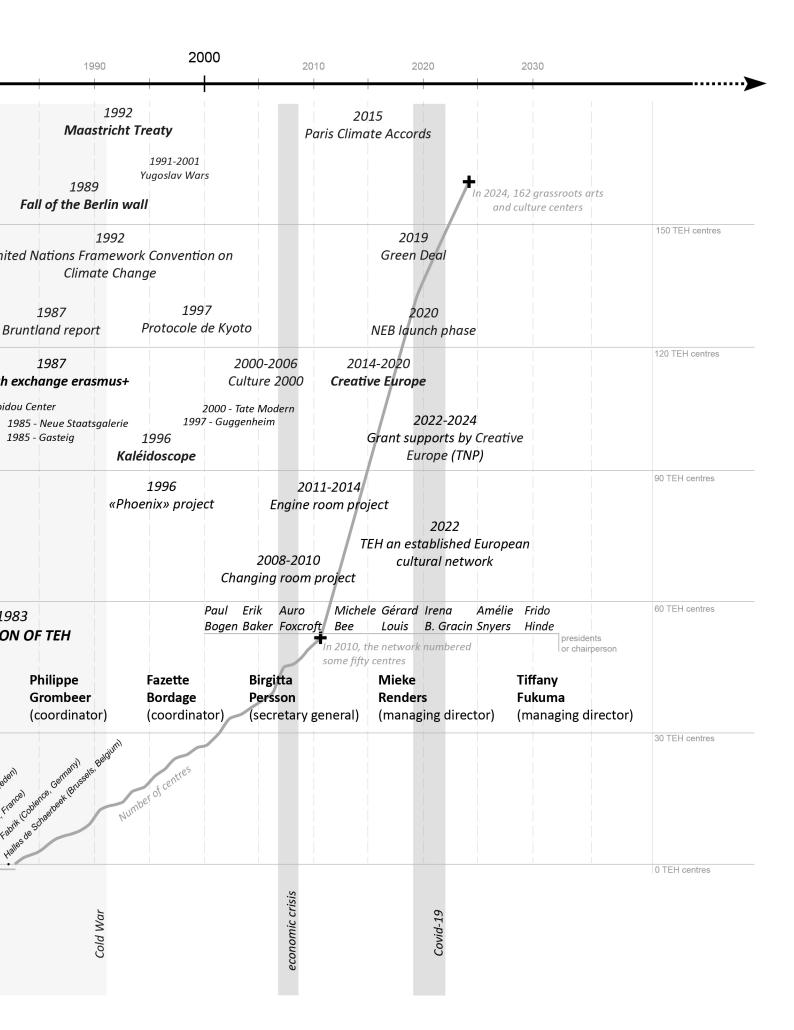
¹⁰ https://www.teh.net/inititatives/phoenix-project/

¹¹ Interview with Fazette Bordage, 33'33", 24/01/2024 - 91'30"

 $^{12 \\ \}text{This term, while common in contemporary discussions on} \\ \text{sustainable practises, is however a fairly new take on the subject. The original TEH} \\ \text{members contacted highlight that terms such as "recycling" or "biodegradability"} \\ \text{were more commonly used at the start of the network.}$

TEH/TIMES AND VISIONS





in 1987, five years later, the 1992 United Nations Framework Convention on Climate Change (UN 1992) then 1997 Kyoto protocol (UNFCCC 1997) set clear objectives for CO² emissions reduction, TEH members attitudes and expertise of the built environment and of socially and ecologically conscious practices are becoming today more and more obviously relevant. TEH focus on infrastructures reuse and care for the land/soil was indeed at the center of the network since its beginning, most centers developing their own relations to their local natural context long before this rise in consciousness: "In Rote Fabrik, there was the lake, in Confort Moderne, we had a garden (...) —you know— everything was already there. But in our mind we were not thinking about sustainability, because the word didn't exist in a way."

The 2015 Paris Agreement (UNFCCC 2015) and the 2019 Green Deal only strengthened this relevancy as Europe more and more aggressively insists on the importance of circularity and re-use but also on the integration of sustainability in social and cultural practices in general. In parallel, the developing interests for the potentials of the cultural economy on local and international levels and the ever-rising real estate values in and around European city centers may equally have contributed to give TEH members, both owners of often vast urban piece of lands and fosterer of cultural and artistic practices, a legitimacy and relevance in the public eye that was previously denied.

At the turn of the 21st century, the development of the network was however perceived with contrasting perspectives within TEH. Under the push of Fazette Bordage, the network was indeed more and more expanding its influence inside and outside Europe¹³. Other members, including original founder Philippe Gombeer, were concerned by the departure of some centers opposing this global-scale strategy. They in turn advocated to keep TEH as a familial and supportive network with a limited number of members. Amidst this conflict of visions, the departure of Fazette Bordage led the way for a downsizing of the network's ambitions. Most European projects within TEH were either halted or reduced, limiting drastically the funding of the organization. The TEH office, then located in Paris and composed of a small team, was closed in 2000, with a sole remaining employee insuring the administrative tasks from Finland, leading to further loss of funding from the French authorities. This shrinkage eventually forced TEH back to its original volunteer-based form despite having grown considerably in size and importance in the previous two decades.

This situation was hardly sustainable. **Birgitta Persson** joined TEH board at the time of Bordage's departure, in 2000, and recounts: "So, there was this crisis. [...] And we were wondering 'What should we do now?' I particularly remember a board meeting with the founder, Philippe Grombeer and some of the board members- and they

were saying that maybe we needed to close the network. Now, they had been there for a much longer time than I did, and I was barely 25 or 30 years old. And I was like 'no, but there are so much potential here, we need to give it a chance!" ¹⁴ A vision group was formed, solely composed of eight younger members of the network, tasked to reestablish a strategy for the future of TEH within a year. This vision group went on to invest the remaining funds towards the organization of recurrent, relevant and affordable meetings for the member organizations with the hope to rekindle a strong collaborative dynamic.

The early 2000's where thus deeply marked by little economical means and a variety of strategies developed to counter this situation. First, the TEH office was reopened within one of the member centers, Kaapelitehdas (Finland) as to benefit from their resources, eventually allowing for the hiring of a new coordinator. The job was subsequently offered to Persson in 2004, a function she would come to occupy for the next 12 years. The office would then move on to Lund (Sweden) as to benefit from regional and local operational grants. Secondly, Persson, building on Bordage's development of the EU voluntary service project, led new grant applications within the youth sector. As the former coordinator recounts, cultural programs were ill-adapted to the TEH members activities; the network was often found too alternative to be seen as legible for the more conventionally -oriented cultural grants. TEH eventually obtained its first operational grant in 2006 through the Youth Exchange Project (YEP), allowing for further stabilization of the network. Thirdly, Persson initiated new relationships with the private sector. A first sponsorship contract was broken with Finnish corporation Nokia which provided the network with new punctual funding as well as communication equipment for all member organizations.

Such strategies resulted in a new considerable expansion of the network; between 2005 and 2008, the TEH organization members number doubled, (Sibelius Academy 2010) soon requiring important restructuration to coordinate over 50 centers.

Development, professionalization, and restructuration

As the creative industry was slowly being recognized as a major strategical sector for occidental economies, TEH resources and expertise have indeed been more and more obvious to many organizations. While the grassroots nature of the network carried lots of debates about the risks and relevancy to contribute to this dynamic, Persson and many others saw it as a considerable opportunity for the network to go forward. Building on this newfound interest for cultural and artistic activities, a then stabilized organization and an important expansion of its members, TEH secured consecutive European cooperation grants that contributed to the development of the network through two important projects: Changing Room (2008-2010)¹⁵

14 Interview with Birtgitta Persson, 11'00", 25/01/2024 -

 $15 \qquad \qquad \text{Changing Room (2008-2010) was a cultural mobility} \\ \text{project led by TEH and co-organized with Melkweg (Amsterdam), Sibelius Academy} \\$

¹³ In the early 2000, through a collaboration with Art Factories, TEH was organizing international events in key cities on every continent and welcoming new members exponantially, reaching a general assembly of over 50 centers.

and Engine Room $(2011-2014)^{16}$. As Persson remembers: "this was the first time we had both a network grant for carrying out the day-to-day work , the meetings, running your office, having money to support the coordinator, ...- and on top of that, we developed Changing Room."

This meant new possibilities to build capacity, develop exchanges and collaborations among the member organizations. It also brought TEH to weight more and more in EU cultural policies as they were increasingly acknowledged as a reliable and well-spread partner for elected representatives and administrations alike. From the small, familial network of support for few centers from the 80's, TEH had grown in the 2000's into an important cultural player on the European scene with the capacity and thrive to lead policy advocacy on various levels.

With this in mind, soon before Persson's departure, TEH developed more and more professional tools. A three year strategic plan for the network was established in 2012 as more employees and more centers had integrated TEH, taking into account such important changes. Among other elements, this plan advocated for an organic rather than strategic growth, with little recruitment strategy and a focus on maintaining and strengthening members relationships and exchanges.

This strategy was applied and developed within the next 8 years under the hands of Persson then, after her departure in 2017, by newly hired managing director Mieke Renders. Due to their efforts, the network was exponentially growing, coming from a little over 50 members in 2010 to more than a 100 ten years later, with the most important jump in numbers of the history of TEH occurring between 2016 and 2020. This situation soon began to put to the test the structure of the network itself. Tiffany Fukuma, current managing director, replaced Renders in 2021 and remembers: "That network used to be family-sized for a very long time, [...] five years before I arrived, it started growing exponentially. But the problem is that the administrative structure, the structure of the network itself had not changed at all. [...] [The statutes] were so old - they had been written in another language, then translated, they were not relevant at all anymore. [...] And in terms of HR and finance management, it was really DIY the way it was run. There was no prospective budgeting,

(Helsinki) in collaboration with twenty-five TEH partner members. Its aim was "to test, study and evaluate a staff exchange programme within TEH. As well as the staff exchange, Changing Room included a professional development programme, [a] study by the Sibelius Academy and an on-line mobility toolkit. [...] its results were intended to produce information that could assist in informing the formulation of future mobility policies, projects and schemes." (Sibelius Academy 2010, p.10) The project was specifically targetting the non-artistic cultural professionals (NAPC's), i.e. "cultural leaders, managers, producers, programmers, curators, technicians, administrators, and those working in marketing, finance and catering." (Ibid.)

 $16 \qquad \qquad \text{Engine Room (2011-2014) was a TEH project dedicated to independent cultural workers and their creative processes. The project was initiated by Trans Europe Halles (TEH) and co-ordinated by Melkweg (Amsterdam, The Netherlands) in association with 10 co-organizing TEH members and proposed various programmes and a resource file compiling the outputs of the project, educational points and know-how from the programmes.$

17 Interview with Birgitta Persson, 22'55", 25/01/2024 - 77'56"

no forecast budget. [...] no centralization, etc. [...] People in the team were also burning out, they didn't know if their work contracts were going to be renewed since there was no budgetary visibility. "

In this context, the global COVID-19 sanitary crisis triggered an important period of difficulties at the heart of the network, with a team of five employees struggling to push the organization further. Starting from this observation, Fukuma set a goal of further consolidation and professionalization with an explicit aim at restructuring the organizational and administrative dimensions of TEH as way to be able to withstand the important and growing number of projects and members. New statutes, progressive membership fees depending on members size, a bigger¹⁸ and more specialized team of employees, a better knowledge and mastery of the archives of TEH as well as new strategies to bring together members, all contributed to an intense period of professionalization of the organization.

While this undertaking was born out of necessity and a period of crisis, it also carried a more ideological shift within the network. Fukuma explains that this move was also done alongside a reframing of the network as a common platform of services at the disposal of both members and network outsiders (policy makers, researchers, ...). As she puts it: "I think it's really time to embrace this political mindset that we have lost, in a way. I think we lost as many cultural institutions due to this kind of neoliberal fashion geared toward creative and smart cities, creative economies, etc. That kind of dragged us a little bit away from the big fights of this time. The collapse of democracy, the rise of fascism and discrimination, the refugee crisis, the climate crisis, of course, and all these things that our members are confronted to on the daily. So it is about preparing our members to be more resilient in the face of all these crises economically, but also to understand better what's coming for them in terms of policies that are going to be not so good for them, and about understanding how to leverage investment for their buildings. In a way, it's about operating on on the scale of the network but for the benefit of our members."19

In a context of multiplication of crisis and difficulties to find funding for artistic and cultural sectors, one of TEH main goals is now to become more resilient as to better support their members through this hardship. This also passes through the development of services directed outside of the network itself: "We can [also] be a platform for policymakers. We can be a platform for, you know, people who are just interested in our sector but come from other sectors , etc." Indeed, such services allows for more funding, as well as develop TEH recognition and capacity to influence the policy making process. This also includes the private sector and the possible, more independent income such collaboration can bring, as Persson had

Between 2021 and 2024, TEH team grew from 5 employees to 15.
Interview with Tiffany Fukuma, 21'36", 22/01/2024 -

84'31"

20 Ibid., 24'40"

already initiated during her time and as Fukuma intends to develop with the opening of TEH business branch in 2024.

This professionalization also comes with new, more extensive and precise strategic plans. Among others things, three main priorities has been established for the future of TEH.

Firstly, more than ever before, the network has set a goal to develop the "green" transition of the built environment. This brings to the foreground the important work of reuse and adaptation of buildings TEH members have been leading since the 1980's, the work that is yet to be done in those particular contexts and the specific funding needed. As she puts it:

"We work in buildings and we are able to transform these buildings. This is our job. But like if you want these buildings to be more green, efficient, sustainable and lasting, and if you want to protect the local populations who work and interact with these spaces, if you want to maintain these activities and its local economy, you need to take care more and more at the infrastructure and uncreasingly invest in that." Through this priority, Fukuma points out the specificity of TEH among the rise of newer and younger networks: "I think we are the only network that is not purely a heritage network that is really considering the question of infrastructure. With this priority, TEH sets an agenda to both support their members in the transition of their built assets as well as take on a role of advocate on the European and local levels to obtain more public funding invested towards infrastructural adaptations in the cultural sector, actively bridging sustainability and cultural issues.

A second priority lays into the diversification of the network and the expansion of TEH beyond a limited network of peers, with its benefits but its many caveats: "(...) this notion of family, of a network of peers is great because there is a lot of connections and we should definitely keep this spirit. But the problem of a network of peers is that it doesn't integrate novelty. It doesn't integrate diversity." Concerned by the homogeneity of the network in terms of age, gender and color, and under the push of its new coordination and a handful of members, TEH has undertaken a so-called "cultural transformation movement "that is aiming at looking at all the hurdles to diversity and to try to change ourselves from inside and open up." 23

Finally, a third priority for TEH has been set as to answer to the current collapse of democracies through Europe which affects more and more centers and their activities: "the fact that we have several members in Ukraine, and that we have a Mediterranean hub, that a lot of our centers -even outside of the zones of conflicts- have had to adapt to a typology of work that is very different from cultural work; The humanitarian work, the social work, … is central. In the beginning, it

was something that they did to address a temporary situation. But this has become the new normal. This is the reality of the life of cultural workers right now, they have to be social and humanitarian workers. And those crises are not ending, they keep growing."²⁴

Following those critical changes within the network, this priority paves the way for what Fukuma identifies as a repolitization of TEH that had been previously downplayed by focusing on more maisn-tream strategies of contributions to the rise of the creative economy. As Fukuma states: "It's more about taking political responsibility as a network of cultural workers to put culture at the heart at of what could be an answer to the different crises. We're opening spaces of dialogue and organizing in different ways, becoming media platforms, connecting communities, etc. Something that in a way had been a little bit lost in the past"²⁵

A resilient and caring network

Such developments and restructuration, along the continuous, tenuous efforts of its members, have led TEH to find more legitimacy and fundings on local and international scales. The network is now the beneficiary of several important grants among which the European Union Horizon, Creative Europe and Erasmus+ Programmes²⁶. Those contribute to support the members of the network through a team of fifteen employees, four geographical hubs (Eastern, Mediterranean, Balkan, Nordic Baltic) and 3 thematic hubs (Arts Education, Cultural Transformation Movement, Sustainable Building).

Given the long and varied history of TEH, one can understand the complexity of the journey to reach that point and develop enough resilience and persistence to carry on this project over 40 years. This history also shows how much of a natural partner TEH is to further define what the New European Bauhaus movement means in term of cultural, artistic, planning and architectural practices. As Fazette Bordage stated (Encore Hereux, 2018): "Those wastelands, this vacancy, this disrepair which nobody wanted to see, this debacle of which nobody knew what to do, leads to dream. [...] those spaces fell into escheat, those obsolete objects as well as those neglected knowhow and distraught territories gain under our impulse a new life. [...] the reconversion of industrial fallows supported by an artistical and political approach transform the notion of value itself".²⁷

This redefinition of value is clearly at work within TEH actions. One could argue that it actively develops at its heart practises of care as they have been more and more defined and highlighted in recent fem-

24 Ibid., 28'14"

25 Ibid., 29'05"

 $26 \qquad \qquad {\rm Other, more \ local \ funds, include \ the \ Swedish \ Arts \ Council,}$ the City of Lund (Sweden) and the Region of Skåne.

27 Original translation from « Ces terrains vagues, cette vacance, ce délabrement que l'on ne voulait pas voir, cette débâcle dont on ne savait pas quoi faire, font penser à rêver. » [...] « espaces tombés en déshérence, objets obsolètes, mais aussi savoir-faire délaissés et territoires désemparés gagnent sous notre impulsion une nouvelle vie. » « La reconversion des friches industrielles soutenues par une démarche artistique et politique transforme la notion même de valeur » P.80

²¹ Ibid., 74'03"

²² Ibid., 26'2"

²³ Ibid., 27'36"

inist litterature (Puig de la Bellacasa 2017, Brugère 2019, Laugier 2020). TEH, in that sense, is a network of care under many respects. Caring is first at the center and the origin of the network in the way it insures mutual support for its members. The reuse, maintenance and progressive adaptation of previously abandoned industrial ruins and their natural assets, at the heart of TEH, can equally be framed as practices of care for our built environment, in close proximity with Charlotte Malterre-Barthes arguments. Finally, in the light of the feminist literature on care, one shouldn't overlook the key leading roles women have played within the network since its beginning. While TEH positions of power and representation have more often than not been occupied by men since 1983, a vast majority of women have been at work to develop strengthen and adapt the network on a daily basis with a clear agenda of care for the members, for the organization itself and for the environements we live in in general. As Fazette Bordage puts it:

"We destroyed the trees, we polluted our waters, we polluted our own beauty and our own power [...] it's so full of inspiration what the role of culture and especially the role these centers already have to enlarge imaginations, enforce changes and give force to our sensibility. [...] If you cut your intelligence from your sensitivity, from what counts for you, the result is what we see today: an economy without immagination. [...] So stop speaking of this kind of rationality which doesn't work. We know now that it doesn't work. No problems but now we have to change. We have to change and we have ideas. We have experience with these centers. Of course it's small, it's small pieces of planet, but if it works on those pieces, that means it can work of the whole planet."²⁸



2.3 TEH through the maps: towards new geographies of Europe?

Through its four decades of existence, TEH has developed a constellation of "spaces of experimentation" through and beyond Europe. These spaces belong to contexts of intense territorial transformation. As seen in the previous chapters most of the centres have invested post-industrial spaces and infrastructures as industries, factories, warehouses, railyards etc. gradually abandoned, following Europe' deindustrialisation. Each of them has made important efforts to capitalise on/valorise the traces of its "built" past to foster and shape local cultural practises within uncertain (economic, political, ecological) conditions.

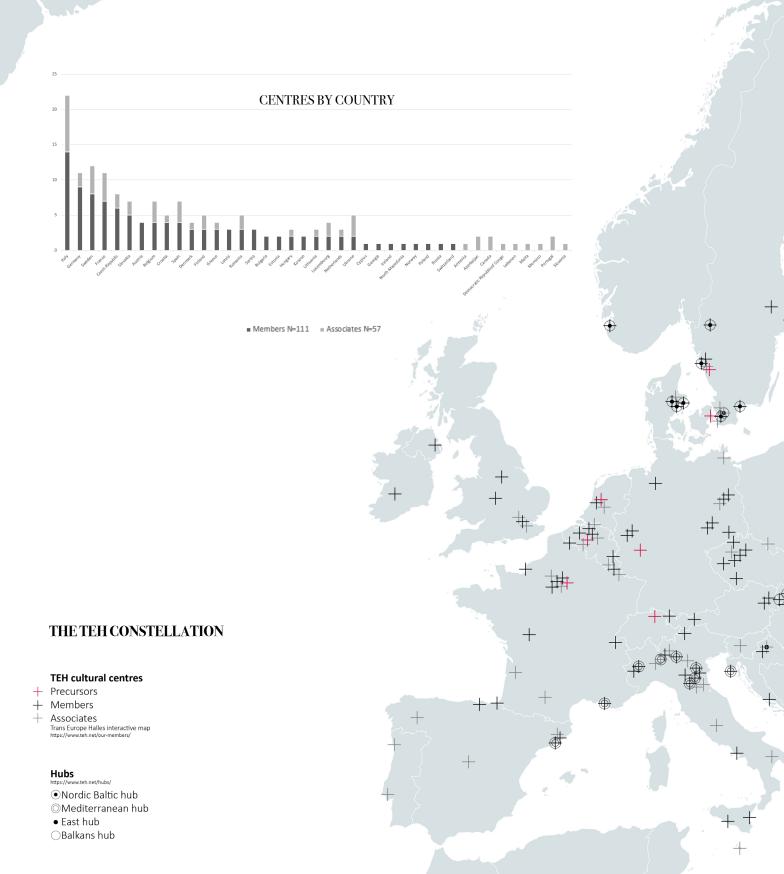
The diversity of these conditions needs to be addressed to provide a good understanding of the network and further explain how TEH can be considered both: a strongly "European" project and a NEB precursor.

Through the following maps, we will engage in a first (overall) description of the network and related cultural centres, through a closer understanding of their locations, relation to industrial and political geographies, major/minor urban centres, climate zones, natural risks and European landscape features. These maps introduce also to alternative ways of understanding European geographies, beyond political borders and within a new set of cultural alliances. We believe that such geographies display new, alternative possibilities for alliances and knowledge that the NEB should capitalize on if we are to collectively reach its goals of profound cultural and spatial change. This new knowledge shall rely more on the concrete understanding of social and biological systems of climate, soil and territorial organization, rather than on the national prescriptions inherited from the post-war stabilization of the European Union. The exploration of these geographies allows also to go beyond the large, generalizing European scale and to start looking more closely to the lived realities of the centres. Each of the following maps will be the occasion to illustrate the richness and diversity of the TEH etwork through a first glimpse of situated examples.

TOU (Stavanger, Norway)

Former brewery

TEH CONSTELLATION







Melkweg (Amsterdam, Netherlands) the eldest - funded in 1970



Imbarchino (Turin, Italy) the youngest - funded in 2019

THE URBAN AND-NOT-SO URBAN REGENERATION

CULTURAL CENTRES AND THE CONTEMPORARY URBAN CONDITION

CULTURAL CENTRES AND THE CONTEMPORARY URBAN CONDITION

Location of centres

Trans Europe Halles interactive map https://www.teh.net/our-members/

TEH's centres located in historic centres

+ TEH's centres located in former industrial areas

TEH's centres located in rural areas

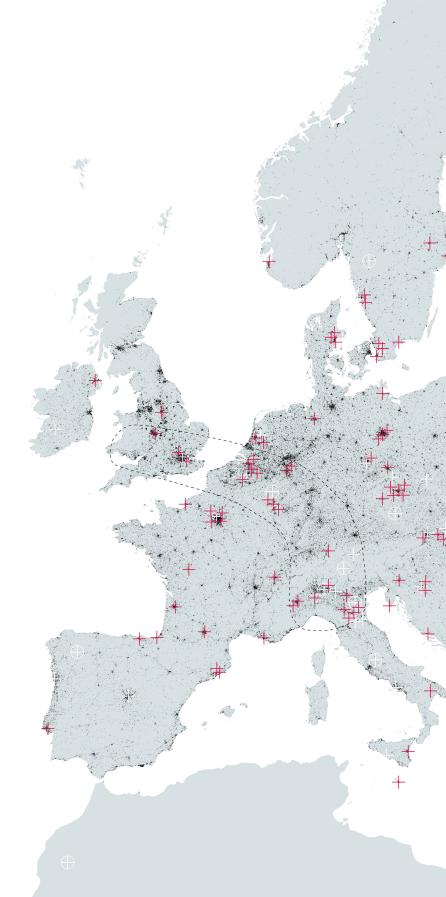
Urbanisation

https://image.discomap.eea.europa.eu/arcgis/rest/services/SoilSealing/SoilSealingV1_Image_LAEA/MapServer

Urban figures

Europe's Macro Regions
https://ec.europa.eu/commission/presscorner/detail/fr/COR_10_3

() Blue banana



When superposed to the different forms of European urbanisation systems, another layer of diversity can be understood within the TEH network. First, the clusters previously mentioned can be directly linked to the four (interconnected) clusters of cities cited by Clark, Moonen and Nunley (Clark et al., 2018). These are clusters of urban centres sharing particular flows of people, labour, capital and ideas. In particular, the authors identify four types of cities characterizing such clusters: the Western European large and capital cities, benefitting from a status of centrality (Amsterdam, Brussels, Frankfurt, Paris, London), the Nordic cities with their own specific set of organization and collaborations (Oslo, Gothenburg, Stockholm, Malmö, Copenhaguen), the Mediterranean cities, characterized by investments in tourism and related infrastructures and services (Barcelona, Lisbon, Lyon, Madrid, Marseille, Milan) and the Eastern and Central European cities, marked by the collapse of the Soviet Union and the following adaptation to capitalist globalized markets (Berlin, Bratislava, Budapest, Prague, Vienna, Warsaw). The authors also identify a specific set of deindustrialising cities, which have gone through a process of reinvention following economic crisis (as for example Charleroi, Sheffield, Lille, Bilbao). The centres located in those different clusters directly echo such economic contexts (and their respective challenges) by their specific and situated choices in terms of cultural and architectural transformation practices.

Secondly, European economic regions of interest also explain some major differences between TEH members. Hence, centres located in the so-called "blue banana", the EU region benefitting from the densest and wealthiest population (RECLUS 1989), are characterized by a stronger economic local context than some of their counterparts, as—for example—those in rural France or Eastern Europe¹, and the related local markets/private interests. A similar observation can be led for centres located along the so-called "golden banana" (European Commission 1991) as the densest region of southern EU, strongly related to an economy of tour-ism. As economic/density dimensions of their local territory vary, the circumstances under which the centres operate necessarily fluctuate, structurally affecting the specificity of their action(s) due to differences in, for example, the type and size of public within reach, their expectations or the local attractivity and level of activity, and thus capacities to easily invite and welcome major cultural actors...

Finally, on a finer scale, variations can also be observed between centres located in city centres (especially in major cities), centres located at the urban periphery and centres located in more remote, often rural or semi-rural areas. Indeed, most of the centres are located within peri-urban areas of important urban centres. In most cases, this condition translates the post-industrial character of TEH' buildings. Indeed, through the 20th century, a great number of industrial areas in Europe have been developed at a (relative) distance from historical city centers, a space rapidly filled after the 60s by rampant urbanization. The desindustrialisation of Europe has left numerous infrastructures in disarray at the heart of such urbanised territories, some of which have been now taken over by TEH members.

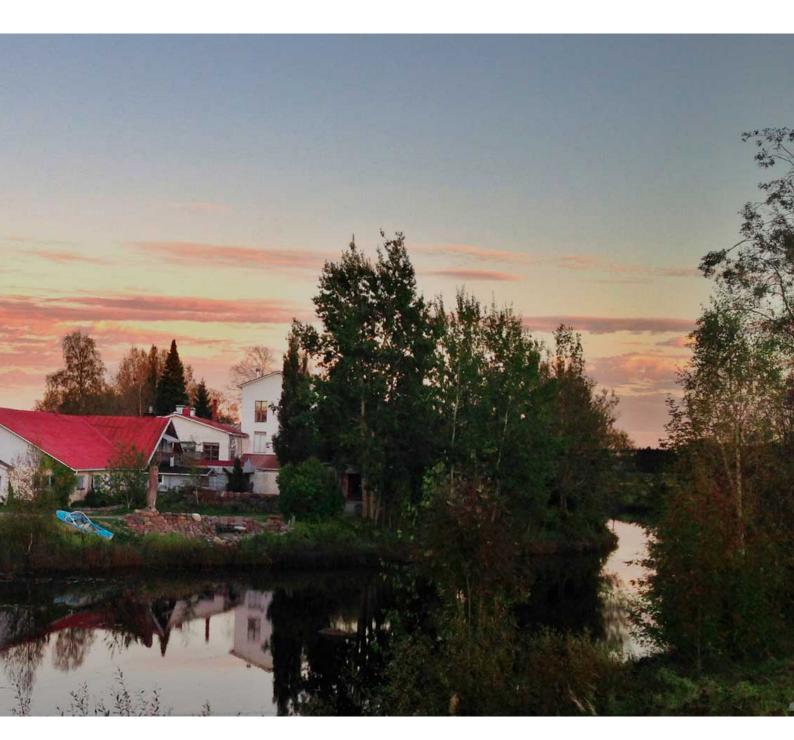
However, a considerable quarter of the surveyed centres are well implanted within historical centres. Some of those situations relate to the investment of an older, and thus more central, industrial infrastructure. They may also be linked to the difficulties many European cities have encountered following the 1960's urban exodus (Merlin 2009); as many middle and upper class populations left for the perirurban and rural regions, urban spaces experienced less economic pressure for redevelopment, leaving many abandoned infrastructures (i.e. hospital, military barracks, prisons... but also smaller buildings such as older commercial or residential constructions) with no perspective for decades. In turn, those tend to present a more varied typology of former land-use than the post-industrial typology present in the periurban areas.

This is also, more often than not, the case of the few TEH centres located in rural areas. Those are for example constituted of farms or proto-industrial buildings such as windmills.

However, this doesn't necessarily mean those center benefit from said economical context. The intense economical circumstances of Paris, Brussels or London, for example, may also signify a more competitive access to public fundings or higher real estate values, often to the detriment of those centers.



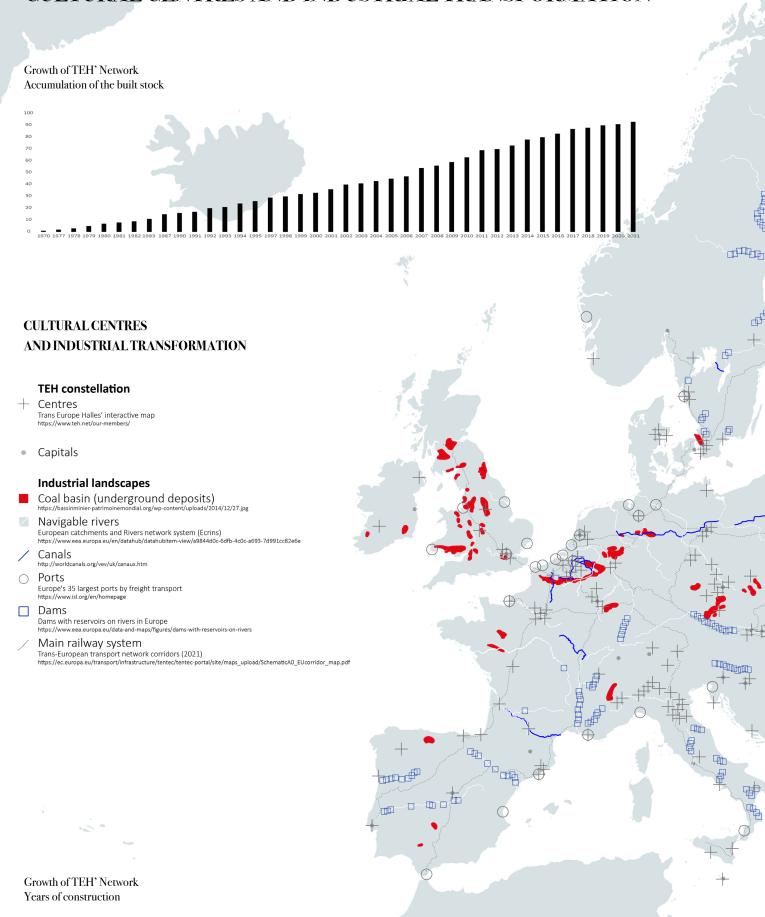
54 Holywell, London City Village Underground (London, United Kingdom)



Ostrobothnia Region *Malakta* (Malax, Finland)

KEY (POST) INDUSTRIAL CONTEXTS

CULTURAL CENTRES AND INDUSTRIAL TRANSFORMATION

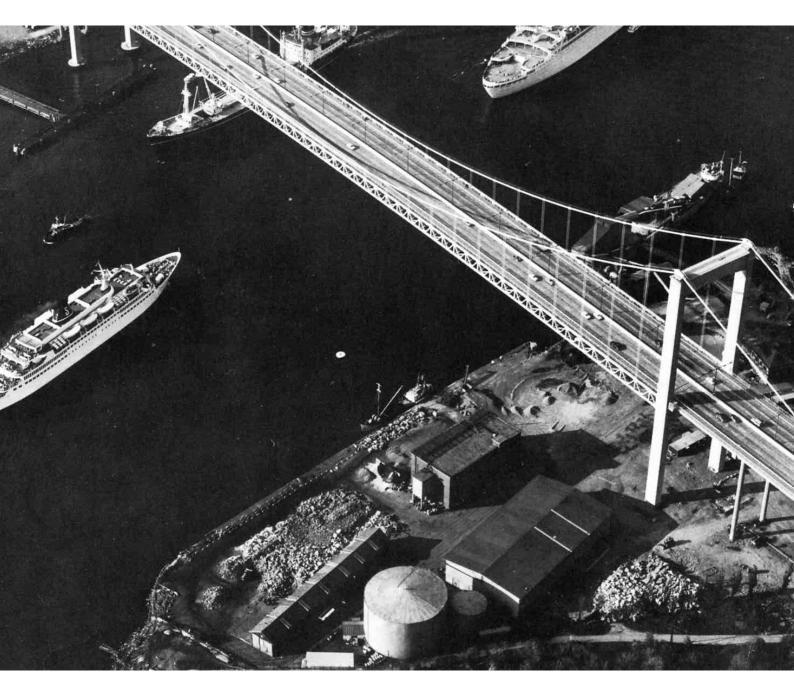


Given the focus of TEH members for the re-use of "abandoned" buildings, and the general context of the European deindustrialisation, the relationship of the centres to the variety of industrial sectors is key to understand their diversity and potential. Through the TEH network, one can distinguish at least three, sometimes overlapping, industrial contexts which -in turn- influence the local architectural and cultural practices of "regeneration".

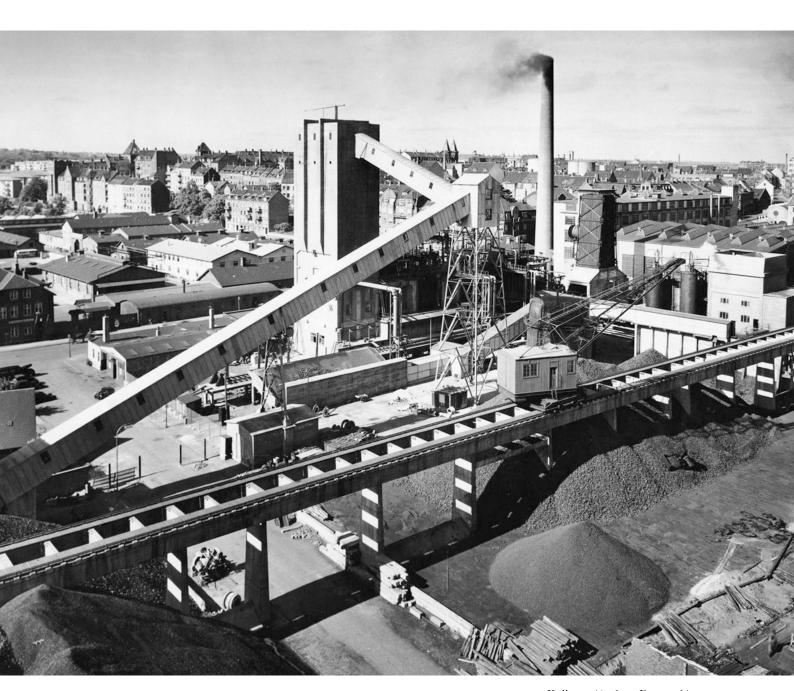
First, in relation to the 19th and 20th century intense coal and steel exploitation throughout a part of Europe, a group of centres take place in infrastructures inherited from that period, displaying typologies and contexts particular to extractive activities (mining sites) and/or the transformation of the extracted materials into consumable goods (blast furnaces, rolling mills, factories, storage buildings ...). While this context can be found all along and within the European "industrial crescent" (Magnette 2023), due to the physical presence of what has been for a long time the needed "industrial fuel" (in red in the map), this is particularly true also within the so-called "industrial triangle", AKA Schuman's vital triangle (Schuman 1950). Indeed, at the turn of the 19th century, the intense industrial development had spread from Great Britain to include a particular zone extending to Northern France and Western Germany. This also explains the large number of centres comprised within this triangle, which often presents strong ties to such industrial history through their former uses as, for example, infrastructures, production or storage units to the service of these industrial activities.

Secondly, these industries were, at the time, heavily relying on a dense network of railways and rail infrastructures (industrial and civil stations, marshalling yards, ...). A relevant number of TEH centres have invested those types of sites, following their gradual decommissioning. Very specific typologies which, in turn, shape particular practices and landscapes of activities. Naval transport and industries have also been —for a long period of time— an important sector of the European economy which has partly fallen into disarray. Several TEH members have repurposed these contexts where the proximity of water streams, riversides, seashores, and harbour infrastructures (quays, wharfs, locks, ...) make for particular circumstances. In such cases (more than others) centres have often grown and occupied more and more space as such infrastructures (especially rail yards or harbours) have progressively decommissioned and ceased their activities. This also results in the neighbouring of the centres' cultural activities with industrial or mobility related activities (freight trains transit, un/loading of shipments, ...).

Finally, other centres display little connections to the heavy industries of coal, steel, and their transportation, but direct relationships to smaller, sometimes older industries. Textile, paper or dairy factories, breweries, mills, agricultural exploitations all make for specific contexts and infrastructures influencing the centres' circumstances. The industrial past and typology of such buildings certainly affect the ways TEH members can and do "regenerate" their centres to open new lifecycles and suit sustainability goals. Often very large and characterised by triple, quadruple (and more) height spaces, built with extremely functionalistic structures/materials and with efficiency of production in mind, such centres face specific challenges especially in terms of heat and energy conservation/consumption.



Röda Sten Konsthall (Gothenburg, Sweden) Reuse of a former boiler house, Port of Gothenburg



Kulbroen (Aarhus, Denmark) Reuse of a coal bridge, Port of Aarhus

DEFINING POLITICAL DIMENSIONS



CULTURAL CENTRES AND POLITICAL CHANGE

TEH constellation

+ Centres

Trans Europe Halles interactive map https://www.teh.net/our-members/

European consitution

Europe's development https://www.europedirectpyrenees.eu/wp-content/up

- State of Europe in 1955 (Benelux)
- State of Europe in 1957
- State of Europe in 1995
- State of Europe in 2024
- Exit

☐ Shengen Space

Alliances

Nordic Alliance

| | | | | Visegrad Union

++ 5+5 Dialogue

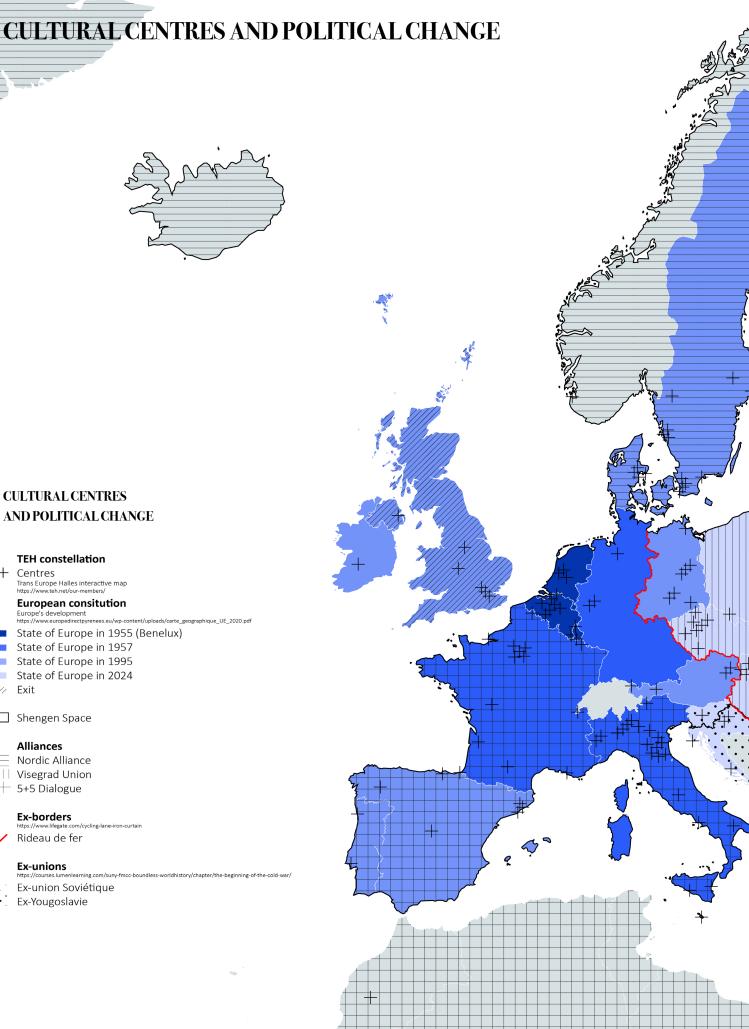
Ex-borders

Rideau de fer

Ex-unions

Ex-union Soviétique

Ex-Yougoslavie





Geopolitical circumstances also play a defining role among TEH members' transformation strategies and choices. TEH members are influenced by their regional circumstances and the existing international networks and partnerships (or major political events) their national context belongs to.

A first divide can be seen concerning the relationships those centres entertain towards two important international spaces: the Schengen area and the European Union. While most centres are situated within those two overlapping zones, others belong to one, the other, or none of them, occasioning distinctive set of circumstances in term of partnership possibilities, access to funding and legal settings for their actions. As they are outside of the EU zone, Swiss and Norwegian members experience different conditions, while still maintaining the benefits of free movement granted by the Schengen area. In the same vein, the recent withdrawal of the United Kingdom from the EU places its various cultural centres under new, different political contexts/restrains. The European Union borders' evolution, in that sense, have considerably influenced the development of the TEH network and the contexts its members work in (and—thus—also the way their transformation strategies/priorities have evolved). As the iron curtain fell and new Eastern European countries joined the EU, a considerable number of centres were created and/or joined TEH, bringing with them the socio-political and economical specificity (and knowledge) of the post-soviet context. Other members within this context are—however—still outside both the Schengen area and the EU. This includes the cases of the Romanian and Bulgarian members² as well as the many members located in countries resulting from Yugoslavia split (Serbia, North Macedonia, Montenegro, Croatia, Slovenia, Bosnia and Herzegovina).

On a finer level of analysis, one can also consider differences between centres depending on specific international partnerships that concern their national context. Hence, Western centres may have privileged relationships and shared references (and knowledge) within the BENELUX countries while southern members might have a stronger Mediterranean and North African influence when in the context of the Euromed 9 Group and the Euromed 9, 5+5 dialogue. Similar observations can be gathered concerning centres located within the Visegràd Group or the Nordic Council.

Those variations are important from at least two points of view. On one side, they show the capacity of the TEH network to maintain and develop a common culture across a great number of different political and cultural contexts. The members all share similar principles and ways of action concerning socio-spatial and ecological transformation of the existing built environment despite those differences. On the other side, those variations do entail certain local particularities due to specific cultural and political circumstances. As such, every centre has developed its own specific knowledge and "cultural regeneration" strategy (adapted to their specific conditions) from which we can learn.

The integration of Romania and Bulgaria to the Schengen area is however planned for March 2024.

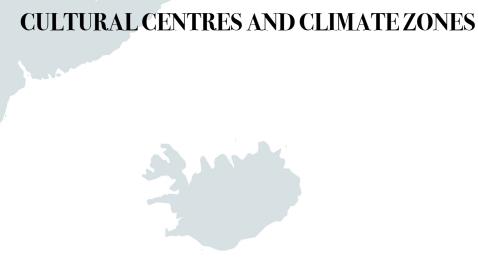


«We initiated a healing process and threw the old ghosts of the nazi propaganda out.» (*Peter Lényi, 2014*) *Ufafabrik* (Berlin, Germany)



Izoylatsia (Kiev, Ukraine) Centre under russian siege since 2.2022

UNDER DIFFERENT WEATHERS



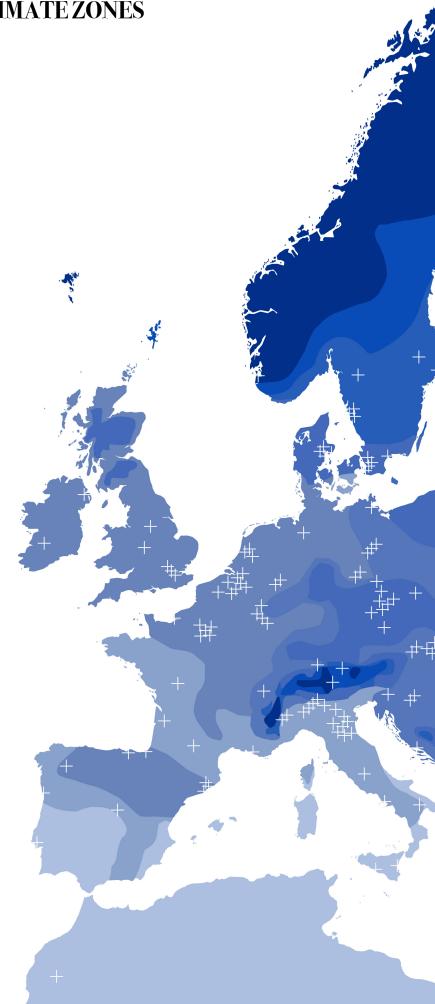
CULTURAL CENTRES AND CLIMATE ZONES

TEH constellation

Centres
Trans Europe Halles' interactive map https://www.teh.net/our-members/

 $\begin{tabular}{ll} \textbf{Climate zones} \\ \textbf{https://www.eea.europa.eu/data-and-maps/figures/observed-climate-zones-in-the/observed-climate-zones-in-the \\ \end{tabular}$

- Boreal north
- Boreal South
- Nemoral
- Continental
- Pannonian
- Maritime south
- Maritime north
- Mediterranen
- No data





Looking at Europe's (extremely various) climate zones is another way one can distinguish TEH centre's conditions and the way they allowed the construction of a vast array of (climate specific) expertise and knowledge within the transformation of the built environment. Some centres are situated in extremely contrasted weather environments, ranging from a Mediterranean climate all the way to Nemoral conditions and, exceptionally, Boreal North conditions. Most of the centres are however situated between those two European extremes; their climates range from maritime north to Pannonian and continental. The consideration of such (strong) variations allows to better understand the specificity of certain strategies and opportunities offered (or not) to different TEH members and the way they have shaped their actions and —in turn— built their specific culture and knowledge on "regeneration" practices.

It may be easier (and for sure extremely different) to adapt a building for all-year use under a gentle Mediterranean or Maritime south climate with rare occurrences of freeze than under the harsh wintery nemoral and boreal conditions, for example. This is a particular concern if we consider the efforts brought in by TEH members to adapt buildings and sites for long-term occupations. Members situated in harsh weather conditions encounter more needs for insulation and, in general, weather protection, than others might, which prove to be both essential and costly. Southern members might have to find wicked and well thought strategies to avoid over-heating, bring shade or protect themselves from harsh coastal winds. Such variations bring a diversity of applied experimentations of adaptation of the post-industrial built environment of Europe, often designed and developed by centres over time with very little funding and following continuous adaptation through trial-and-error dynamics.

Climate zones may also contribute to specific cultural practises and social behaviours marking different design trajectories and attitudes. While — for example—southern regions may contribute to a culture and practices of occupying public/open space all year long and develop extensive public activities (within a "outside as inside" approach), northern regions may be marked by a stronger investment of indoor spaces (and related creative solutions) with related different cultural and social behaviours (towards an "inside as outside" attitude). Such differences are —in some cases—further strengthened in regions were contrasts between winter and summer are more marked, making for stronger differences in the way centres may play social and cultural roles in their locality throughout the year. Such differences also need to be accounted for if we consider current climate changes and the risks, they bring for a wide array of regions, as will be displayed in the following map.



Outside lived as inside space Farm Cultural Park (Favara, Italy)



Inside lived as outside space *Röda Sten Konsthall* (Gothenburg, Sweden)

RISKY FUTURES

CULTURAL CENTRES AND ENVIRONMENTAL RISK



CULTURAL CENTRES AND ENVIRONMENTAL RISK

TEH constellation

Centres

Trans Europe Halles' interactive map https://www.teh.net/our-members/

Environmental risks

Tropical nights https://climate.discomap.eea.europa.eu/

- Over 50 days/year (2020-2050)
- Over 50 days/year (2050-2100)

$$\label{eq:controlled} \begin{split} & Droughts \\ & \textit{Frequency change (2041-2070)} \\ & \textit{https://climate.discomap.eea.europa.eu/arcgis/rest/services/ClimateChange/Drought_Frequency_change/MapServer} \end{split}$$

- 1 to 2
- >2

Coastal Flooding

Percentage of Urban Morphological Zone (UMZ) potentially affected by coastal flooding, assuming a sea level rise of 1m https://climate.discomap.eea.europa.eu/arcgis/rest/services/UrbanAdapt/River_Floods_UMZ_v4/MapServer

- 20-40%
- 10-20%

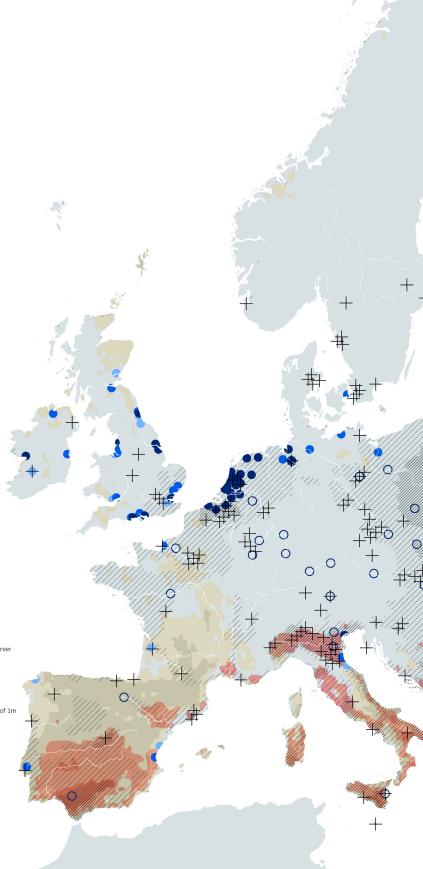
River Floods

https://climate.discomap.eea.europa.eu/arcgis/rest/services/UrbanAdapt/River_Floods_UMZ_v4/MapServer

Areas most at risk from flooding

Annual average concentration of PM $_{2.5}$ (µg/m3) in 3 years average (2018-2020) https://discomap.eea.europa.eu/atlas/?page=Air-pollution

- % > 25µg/m³
- $\frac{18-25 \mu g}{m^3}$



Climate, however, is rapidly changing especially due to human's action under the last centuries (Anthropocene). The various implications of such fluctuations imply very different conditions for TEH members, often at the heart of their adaptation strategy(ies). As the 2021 European Environment Agency report³ on Europe's changing climate hazards has highlighted, 16 hazards, regrouped in 6 categories can be expected to increase in the decades to come.

Temperature changes are a first important transformation that will further the differences between European weather zones exhibited in the previous map. As hot extremes and humid heatwaves are expected to increase steadily, more and more regions (especially Mediterranean and Maritime southern ones where an important number of centres are located) will see their living conditions become increasingly difficult to maintain. Such condition has already and may increasingly affect both cultural practises and adaptation and transformation strategies of the built environment.

Increase in precipitations/draught episodes will also see important changes, heavily affecting spatial and social conditions throughout Europe. Annual precipitations and heavy rainfalls are expected to increase in Northern Europe while Central and Southern Europe may face important increase in cycles of both river floods and drought/fire hazards. Coastal regions are also expected to be impacted by increase of mean and extreme sea levels, to the exception of the regions surrounding the northern Baltic Sea, due to its still rising land levels following the last ice age⁴. Looking at air pollution levels, one can also observe that an important number of TEH centres (especially in southern Europe) are concerned by problematic levels of pollutants on a daily average⁵ and on an increasingly regular basis.

In this frame, while several members are already accustomed and prepared to face similar circumstances, other will face them on an increasingly regular basis, in the years to come. Thus, lessons learned from "pier to pier" (among members which have developed precise adaptation strategies/expertise) become increasingly crucial.

A set of risks which need to be understood also as furthered by specific topographical and land-scape conditions which are addressed in the next section. Plateaus, riverbeds, or wide plains surrounded by mountains (typical among TEH centres given their former industrial function) all constitute—for example—very particular environments where flood hazards are amplified and pollutants accumulate.



³ https://www.eea.europa.eu/publications/europes-changing-climate-hazards-1/what-will-the-future-bring

All European regional seas are projected to see their surface temperature increase, provoking an increase programme measures while their water is expected to become more acidic, resulting in severe changes in biodiversity and the local cultural practises linked to such environments. (from cooking and fauna and flora observations to more thorough and vital human/non-human collaborations)

The World Health Organization recommands that the mean annual concentration should not exceed 5 μg/m3, and the daily concentration should not exceed 15 μg/m3 more than 3-4 days per year while most centers are located in areas with an annual average concentration exceeding 18 μg/m3, for most, and 25 μg/m3 for the most problematic areas.



August 2023 - 44.0 $^{\circ}$ C measured temperature the highest ever recorded in the north of Spain *Bitamine Faktoria* (Irun, Spain)



October 2023 - Flood in Aarhus $\mathit{Institut\,for}(X)$ (Aarhus, Denmark)

TOWARDS A LANDSCAPE APPROACH





CULTURAL CENTRES AND LANDSCAPE FEATURES

Teh constellation

Centres

Trans Europe Halles' intercative map https://www.teh.net/our-members/

Landscape features

Hydrography
European catchments and Rivers network system (Ecrins)
https://www.eea.europa.eu/en/datahub/datahubitem-view/a9844d0c-6dfb-4c0c-a693-7d991cc82e6e

Topography https://www.mapzen.com/tag/terrain/

Biogeographical regions

Alpine

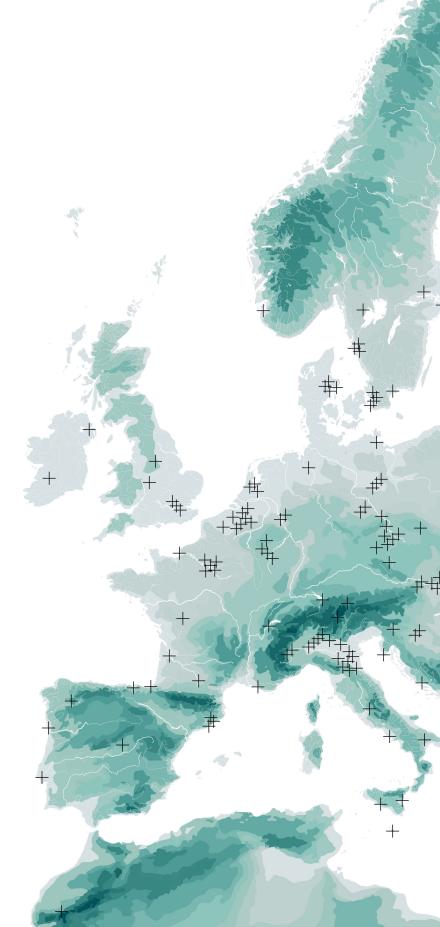
Atlantic Boreal

Continental

Mediterranean

Pannonian





In terms of landscape features, TEH centres are situated within a wide variety of conditions, representative of European's strong topographical and geological diversity.

At a finer scale, due to the specificity of TEH buildings' former functions, most of the centres are located within environments particularly adequate for industrial development: characterized by a mainly flat topography allowing for the development of transport infrastructures (i.e. rail network, transportation channels etc.) and the progressive growth of the same, i.e. river beds, shores, valley beds and plateaus. A smaller selection of centres, in particular in southern Europe, are surrounded by a more dramatic landscape while still benefiting from the advantages of plain-type situations that have developed artificially or naturally amidst this topography, a dual condition that particularly affects weather and run-off conditions. Finally, a small number of centres are characterized by a full mountainous condition, as the ones located within the Alps or the Balkan Mountains.

At a larger scale, looking at European biogeographic regions⁶, it can be established that most TEH centres are located within the Atlantic (characterized by low elevations to the north and hillier conditions to the south, and the wide floodplains of the Danube and Po rivers with their related vegetation), Boreal (characterized by its relatively low elevations, its coniferous and taiga forests and water streams, humic lakes⁷s and wetlands) and Continental (characterized by its proximity to the Atlantic Ocean, its low elevation and intense human-led landscape alterations) regions. Beyond the relatively similar topographies, such variations do account for different climate, vegetation, and biodiverse contexts between the centres. As mentioned earlier, a smaller number of centres are characterized—on one hand—by a mountainous Alpine landscape (characterised by harsh climate and mix of grasslands, scrub heath and rocky environments hosting two thirds of European vegetal species which call to protection) and—on the other hand—by a Mediterranean context (characterised by a strong proximity to the sea, hilly terrain, semi-arid steppes, sandy and rocky shores and a vegetation composed by scrubs, woodlands and forests), a land-scape hosting an extremely rich and diverse flora/fauna, increasingly threatened by intensive touristic activities and development practices to which cultural centres offer interesting alternatives.

Finally, a smaller selection of centres, resulting from the post-soviet development of the network in Eastern Europe, are located in the Pannonian biogeoregion of the Great Hungarian Plain characterised by sand dunes and steppes, grasslands, and mixed forests. Such centres lay in the vast alluvial basin delimited by the Carpathian Mountains, the Alps and the Dinaric Alps and structured by the Danube and Tisza rivers. Due to the complex nature of this area, the centres regularly face varying weather conditions, including important storms, caused by interactions between wet winds from the West, dry winds from the South and cool winds from the Alps and Carpathians ranges. A condition expected to face stronger droughts in the decades to come, causing the drainage of wetlands, important salinisation and alkalisation of the soils while still dealing with consequent heavy metal pollutions of many local rivers due to the mining industry.

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The biogeoregions or biogeographic regions are a tool defined by the European Environment agency in an effort to set a general framework for coordinating and reporting overall result sof conservative efforts. First established in 1992 through the Habitats Directive, this map has siene then been updated several times to cover the entire pan-European area and ackowledge the main differences between the regions. The different regions are established following a series of biological, climate and topographical criterions which in turn allow to caracterize the main threats the regional biotopes are facing.

Humic or dystrophic takes contain high amounts of humic substances and organic acids allowing little biodiversity to survive. Those mainly consist of algae, phytoplankton, picoplaskton, and bacteria.

^{*}



Val Venosta Alpine valley Basis Vinschgau Venosta (Silandro, Italy)



Rhodopes mountains Pro Rodopi Art Centre (Bostina, Bulgaria)

CHARACTERS

Name	Year of foundation	Geographical location	Internal spaces (sqm)	External spaces (sqm)	Historical function
7Arte		Mitrovice, Kosovo			
A38 Ship	2002	Budapest, Hungary			Stone-carrying ship
A4 - Space for contempory culture	2004	Bratislava, Slovakia	654	100	YMCA organisation for their activites
Allerweltshaus Köln E.V.	1987	Cologne, Germany	UJ-T	100	Tivica organisation for their activities
Alte Feuerwache	1977	Cologne, Germany			Fire station
Amigdala / ovestlab	2008	Control of the Contro	300	100	
Anibar	2010	Moderna , Italy	800	100	Workshop
	2010	Peja, Kosovo	800	100	Cinema
Antic teatre - espai de creació slu	2014	Barcelona, Spain	14000		
Aparaaditehas	2014	Tartu, Estonia	14000		Manufacture of refrigeration equipment and secret
Art Factory Łódź / Fabryka Sztuki	2010	Łódź, Poland	400	y	
Asociatia arta În dialog (cinemá arta)	2019	Cluj-Napoca, Romania	400	1	Cinema
Asociatia casa plai	2015	Timisoara, Romania			Hat factory
Association Toplocentrala	2014	Sofia, Bulgaria			Heating plant
Associazione OltreAps	2014	Bologna, Italy			
Ateliersi		Bologna, Italy			640 N S 1850 S 55 8 S
Bakelit Multi Art center foundation	1999	Budapest, Hungary			War products and then textil factory
Banda Larga Associazione Culturale	1372/02/1	Turin, Italy	22-23	barras	* S *
Basis Vinschgau Venosta	2014	Silandro, Italy	2300	40000	Military barracks
Beat Carnival	1993	Belfast, United Kingdom	1951	1	Engineering works and various other manufacturing
Bitamine Faktoria	2011	Irun, Spain	255	1	Innovation center (historical and actual function) 6
Blivande		Stockholm, Sweden	963	2800	Industrial harbor administrative building and restau
Bloom	1987	Mezzago, Italy	600	450	Ballroom and cinematograph
Brunnenpassage	2007	Vienna, Austria	350	1	Market hall
C.AR.M.E	2017	Brescia, Italy	1640	100	Church
Cads youth yorkshire	2009	Sheffield, United Kingdom			Iconic cinema
Center for creative industries (cci) fabrika	2005	Moscow, Russia	17500	1	Technical paper mill
Center for cultural decontamination	1995	Belgrade, Serbia	220		Private museum
Centrala Space	2015	Birmingham, United Kingdom			
Communitism		Athens, Greece	1200		Weaving factory
Consorzio Wunderkammer	2011	Ferrara, Italy			River warehouse
Cooperations	1990	Wiltz, Luxembourg	5000		
Cultural centre rex	1994	Belgrade, Serbia			
Cultural development association	1995	Zagreb, Croatia	338	1	Industrial
Culture Hub Prostor		Split, Croatia			
Cultureghem		Anderlecht, Belgium			
Culturen		Västerås, Sweden	4200		
Die Bäckerei - Kulturbackstube	2010	Innsbruck, Austria			Bakery
Fabrika Tbilisi		Tbilisi, Georgia			Sewing factory
Farm Cultural Park	2010	Favara, Italy	2500	2500	Private houses and courtyards
Fix in Art	2011	Thessaloniki, Greece			Brewery
Fort!		Le Havre, France		70000	Military fort
Friche la belle de Mai	1992	Marseille, France	50000	50000	Tabacco manufacture
GEH8	2007	Dresden, Germany	960	1200	Train workshop
Haceria Arteak	1997	Bilbao, Spain	1445		, and the state of
Halle 14		Leipzig, Germany	20000		Cotton mill
Ifö Center	2011	Bromölla, Sweden	43000		Ceramic factory
Imbarchino	2019	Turin, Italy	608	200	Boat depot
Institut for (X)	2009	Aarhus, Denmark	000	12000	Train depot
Institute for environmental solutions	2013	Cēsis, Latvia		12000	Brewery
Izolyatsia / Izone	2010	Kyiv, Ukraine			Insulation materials factory
Kaapelitehdas	1991	Helsinki, Finland	63000	1500	Cable factory
Kanepes Kulturas Centrs	1331	CAMPAGE CARACTER STORE TO AN AND THE RESIDENCE AND	03000	1300	Cable factory
Klub Mocvara URK	2008	Riga, Latvia Zagreb, Croatia	937	600	
	1987	AND THE RESERVE TO TH			F-131-66-1
Konstepidemin	1967	Gothenburg, Sweden	5633	1	Epidemic hospital
Kulbroen / The Coal Bridge		Aarhus, Denmark			Coal bridge
Kultura Medialna	1003	Dnipro, Ukraine	E104 4	3000	Claudeteck
Kulturfabrik	1983	Esch-sur-Alzette, Luxembourg	5184,4	3000	Slaughterhouse
Kulturzentrum Schlachthof	1979	Bremen, Germany			Slaughterhouse
La station/Collectif MU	2016	Paris, France			Coal station
Laminarie	1994	Bologna, Italy			
L'Asilo	2012	Naples, Italy	122221		
Le confort moderne	1980	Poitiers, France	8500		Household appliance shop
Le plus petit cirque du monde	1992	Bagneux, France	1900	9400	Sport centre
Les Halles de Schaerbeek	1983	Brussels, Belgium			Covered market
L'hybride (rencontres audiovisuelles)	2007	Lille, France	540	/	Car garage
Magacin cultural center	2007	Belgrade, Serbia	2128	1	Warehouse

co	uilding's onstruction ear	Typology	Building materials	Relation cultural centre & city centre	Proportion open space/built-up space	Insulating the centre
				Located in historic centre		
	968 921	Infrastructural Evenementiel	Steel Brick, concrete	Located in historic centre Located in periphery of the centre Located in periphery of the centre	Prevelance of open spaces Prevelance of built spaces Equal distribution of spaces	No
18	380		Brick	Located in periphery of the centre	Equal distribution of spaces	
19	953	Industrial	Concrete block	Located in periphery of the centre	Prevelance of built spaces	No
19	950	Evenementiel	Brick, concrete	Located in historic centre	Prevelance of built spaces	No
16	550		Stone	Located in historic centre	Prevelance of built spaces	
s for su	ıbmarines	Industrial	Brick	Located in periphery of the centre	Equal distribution of spaces	
19	913	Evenementiel	Brick, concrete	Located in periphery of the centre Located in periphery of the centre	Prevelance of built spaces Equal distribution of spaces	No
		Domestic Infrastructural		Located in periphery of the centre Located in periphery of the centre Located in periphery of the centre	Prevelance of open spaces	
		Religious		Located in historic centre	Prevelance of built spaces	
19	900	Industrial		Located in periphery of the centre	Equal distribution of spaces	
				Located in periphery of the centre	Prevelance of built spaces	
19	937	Military	Brick	Located in rural area	Prevelance of open spaces	Partially
18	300	Industrial	Brick, steel	Located in periphery of the centre	Prevelance of built spaces	Partially
m2 20		Service	Concrete, glass	Located in periphery of the centre	Prevelance of open spaces	Yes
	919	Industrial	Wood	Located in periphery of the centre	Prevelance of open spaces	Yes
19	948	Evenementiel	Brick, concrete	Located in rural area	Equal distribution of spaces	Partially
11	150	Service	Steel, glass	Located in periphery of the centre	Prevelance of built spaces	Partially
	150 920	Religious	Brick, concrete Stone	Located in historic centre	Prevelance of built spaces	Partially
	929	ladustalal	Brick, concrete	Located in periphery of the centre Located in periphery of the centre	Prevelance of built spaces Prevelance of built spaces	Yes
	931	Industrial Evenementiel	Stone	Located in periphery of the centre	Prevelance of built spaces	163
13	731	Everientender	Stone	Located in periphery of the centre	Prevelance of built spaces	
19	928	Industrial		Located in historic centre	Prevelance of built spaces	
	940	Infrastructural		Located in rural area	Prevelance of open spaces	
				Located in rural area		
		Evenementiel		Located in historic centre	Prevelance of built spaces	
19	960	Industrial	Brick, concrete	Located in periphery of the centre Located in periphery of the centre	Prevelance of built spaces	No
				Located in periphery of the centre	Equal distribution of spaces	
19	913	Industrial	Brick, steel	Located in periphery of the centre Located in historic centre	Prevelance of built spaces Prevelance of built spaces	
		Industrial	Concrete	Located in historic centre	Equal distribution of spaces	
	010	Domestic	Brick, glass	Located in historic centre	Equal distribution of spaces	No
	388	Industrial	-	Located in periphery of the centre		
	356	Military	Brick	Located in periphery of the centre	Prevelance of open spaces	D
	368 968	Industrial	Concrete Brick, concrete, steel	Located in periphery of the centre Located in periphery of the centre	Equal distribution of spaces Equal distribution of spaces	Partially Partially
	950	Infrastructural Industrial	brick, contrete, steel	Located in periphery of the centre	Prevelance of open spaces	raitially
	390	Industrial	Steel	Located in periphery of the centre	Prevelance of built spaces	
		Industrial	Concrete	Located in periphery of the centre	Equal distribution of spaces	
19	970	Infrastructural	Concrete, wood	Located in periphery of the centre	Prevelance of open spaces	Partially
		Infrastructural	Brick	Located in periphery of the centre	Prevelance of open spaces	£.
			Located in rural area	Prevelance of open spaces		
19	955	Industrial	Concrete, steel	Located in periphery of the centre	Equal distribution of spaces	
19	939	Industrial	Brick	Located in periphery of the centre	Prevelance of built spaces	Yes
		domestic		Located in historic centre	Equal distribution of spaces	
	950	Industrial	Concrete	Located in periphery of the centre	Equal distribution of spaces	No
18	386	Service	Brick	Located in historic centre	Equal distribution of spaces	No
		Infrastructural		Located in periphery of the centre	Prevelance of open spaces	
10	200	Agricultural	Brick, concrete	Located in periphery of the centre	Prevelance of built spaces Prevelance of built spaces	Partially
	388 397	Agricultural Industrial	Brick, concrete Brick, metall, glass	Located in periphery of the centre	Prevelance of built spaces Prevelance of built spaces	Partially Partially
	950	Industrial	orick, metall, grass	Located in periphery of the centre Located in periphery of the centre	Treverance or built spaces	i ai dany
				Located in periphery of the centre	Equal distribution of spaces	
		Religious	stone, wood	Located in historic centre	Prevelance of built spaces	
		Industrial	Concrete block, steel	Located in periphery of the centre	Prevelance of built spaces	
19	960	Service	Wood	Located in periphery of the centre	Prevelance of open spaces	Yes
32570			Stone, metalic structure	Located in historic centre	Prevelance of built spaces	
18	365 970	Industrial	Brick, metalic structure	Located in historic centre	Prevelance of built spaces	No

Mains d'oeuvres	2001	Saint-Ouen, France	4000	300	Social and sports workers' centre
Malakta	2007	Malax, Finland	800	7000	Dairy
Maltafabrikken	2013	Ebeltoft, Denmark			Malt factory
Malý Berlín	2017	Trnava, Slovakia	475	500	Townhouse, shops and workshops
Manifatture Knos	2007	Lecce, Italy	4000	15000	Metallurgical school
Meatpack	2017	Antwerp, Belgium	1000		Foam factory
Mejeriet	1987	Lund, Sweden			Dairy factory
Melkweg	1970	Amsterdam, Netherlands			Sugar factory and dairy
Menu Spaustuve (Arts printing house)	2002	Vilnius, Lithuania	2910	1	Printing house
Moos		Berlin, Germany		W. N	rancestrate at Victoria An
Moritzbastei	1982	Leipzig, Germany	1610	1400	Military bastion
Mottattom	1999	Geneva, Switzerland	1100	1	Shed stables
Moving Station	2000	Pilsen, Czech Republic			Train station
Nau Ivanow	1997	Barcelona, Spain	1200	425	Painting factory, textile factory
Nimac	1994	Nicosia, Cyprus			Powerhouse
Noas	1998	Riga, Latvia			
Not Quite	2002	Fengersfors, Sweden			Paper factory
Nová Cvernovka	2016	Bratislava, Slovakia	18000	22000	Chemistry school
ODC Ensemble		Athens, Greece	2000		
Ormston House	2011	Limerick, Ireland			Beverage commerce
P60	2001	Amstelveen, Netherlands	2090		
Plum Yard / Švestkový Dvů	2013	Malovice, Czech Republic	1074	2286	Farm
Pohjala Tehas	2018	Tallinn, Estonia	15000	17000	Russo-baltic shipbuilding and
Pragovka Gallery		Prague, Czech Republic	1400		rubber factory
Pro Rodopi Art Centre	2004	Bostina, Bulgaria	1400		Kindergarden
Röda Sten Konsthall	2006	Gothenburg, Sweden	1500	1	
Rojc Alliance (savez udruga rojca)		Pula, Croatia	16739	33354	Boiler house
SCS Centar Jadro		Skopje, North Macedonia			
SODAS 2123	2020	Vilnius, Lithuania	4400	8489	School for children with special needs
Spielboden Kulturveranstaltungs GmbH		Dornbirn, Austria			
Studio Alta	2007	Prague, Czech Republic	600	930	Care centre for disabled veterans
Subtopia	2002	Stockholm, Sweden			Barn
Tabacka Kulturfabrik	2009	Košice, Slovakia	2000	700	Tabacco factory
Timis Country Youth Foundation	1978	Timișoara, Romania	11000		Sports and recreation building
TOU	2001	Stavanger, Norway	14500	500	Brewery facilities
Truc Sphérique - stanica	2003	Žilina, Slovakia	300	1500	Train station
Truc Sphérique - synagoga	2011	Žilina, Slovakia	1200	200	Synagoga
Ufafabrik	1979	Berlin, Germany	18600		Cinema production factory
Veřejný sál Hraničář	2014	Ústí nad Labem, Czech Republic			Cinema
Verkatehdas	1980	Hämeenlinna, Finland			Baize factory
Viernulvier	2017	Ghent, Belgium			
Village Underground	2006	London, United Kingdom			Railway viaduc and warehouse
Vzlet	2021	Praha, Czech Republic			Cinema
WUK	1981	Vienna, Austria	12000	-/	Locomotive factory, technical high school
Zentralwerk	2005	Dresden, Germany			
Zo centro culture contemporanee	1997	Catania, Italy			Sulphur refinery

1959	Service	Brick	Located in periphery of the centre	Prevelance of built spaces	
1930	Industrial	Brick, concrete, wood	Located in rural area	Prevelance of open spaces	Partially
1861		Brick, concrete	Located in historic centre	Equal distribution of spaces	
2014	Domestic	Brick, concrete	Located in historic centre	Prevelance of built spaces	Yes
	Industrial	Concrete	Located in periphery of the centre	Prevelance of open spaces	Partially
			Located in periphery of the centre	Prevelance of built spaces	
	Industrial	Brick	Located in historic centre	Equal distribution of spaces	
1920	Industrial	Brick	Located in historic centre	Prevelance of built spaces	
1585	Industrial	Brick, concrete, steel	Located in historic centre	Equal distribution of spaces	Yes
			Located in periphery of the centre	Prevelance of built spaces	
1551	Military	Brick	Located in historic centre	Equal distribution of spaces	Yes
1910	Industrial	Concrete, metal framework, glass	Located in periphery of the centre	Prevelance of built spaces	No
	Infrastructural		Located in periphery of the centre	Prevelance of built spaces	
1958	Industrial	Brick, glass	Located in periphery of the centre	Prevelance of built spaces	Partially
	Infrastructural		Located in historic centre	Prevelance of built spaces	
		Concrete	Located in historic centre	Prevelance of open spaces	
	Industrial	Brick	Located in rural area	Prevelance of open spaces	
1948	Service	Brick, concrete	Located in periphery of the centre	Equal distribution of spaces	
	Industrial		Located in historic centre	Equal distribution of spaces	
1750		Stone	Located in historic centre	Prevelance of built spaces	
			Located in periphery of the centre	Prevelance of built spaces	
1868	Agricultural	Brick, stone, wood	Located in rural area	Equal distribution of spaces	Partially
1924	Industrial	Concrete	Located in periphery of the centre	Equal distribution of spaces	Partially
1950	Service	Stone, bricks	Located in periphery of the centre	Prevelance of open spaces	Yes
			Located in rural area	Prevelance of open spaces	
1940	Infrastructural	Brick, concrete	Located in periphery of the centre	Equal distribution of spaces	No
1870	Military	Brick, concrete, stone	Located in periphery of the centre	Equal distribution of spaces	Yes
	Industrial		Located in periphery of the centre	Prevelance of built spaces	
1940	Service	Brick, concrete	Located in periphery of the centre	Prevelance of open spaces	Partially
			Located in periphery of the centre	Equal distribution of spaces	
1731	Service	Brick, stone, wood	Located in periphery of the centre	Prevelance of built spaces	Yes
1902	Agricultural		Located in periphery of the centre	Prevelance of open spaces	
1851	Industrial	Brick, steel	Located in periphery of the centre	Prevelance of built spaces	Partially
	Service	Concrete	Located in periphery of the centre		
1895	Industrial	Concrete	Located in periphery of the centre	Prevelance of built spaces	Partially
1945	Infrastructural	Brick	Located in periphery of the centre	Prevelance of open spaces	Yes
1931	Religious	Brick	Located in historic centre	Prevelance of built spaces	No
1933			Located in periphery of the centre	Equal distribution of spaces	
1923	Evenementiel		Located in historic centre	Prevelance of built spaces	
1850	Industrial	Brick	Located in periphery of the centre	Equal distribution of spaces	
1911	Evenementiel		Located in historic centre	Prevelance of built spaces	
	Infrastructural	Brick	Located in periphery of the centre	Prevelance of built spaces	
1921	Evenementiel		Located in periphery of the centre	Prevelance of built spaces	
1866	Industrial	Brick, concrete	Located in historic centre	Prevelance of built spaces	Partially
	Industrial	Concrete	Located in periphery of the centre	Equal distribution of spaces	
		Brick	Located in periphery of the centre	Prevelance of built spaces	

CHARACTERS

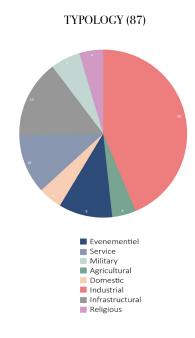
As to further characterize the diversities of TEH' centres, an inventory of the centres has been established through thirteen criterions. This inventory can be understood as an attempt at a first, extreme synthesis of the TEH constellation, we present it here through the seven most relevant criterions⁸.

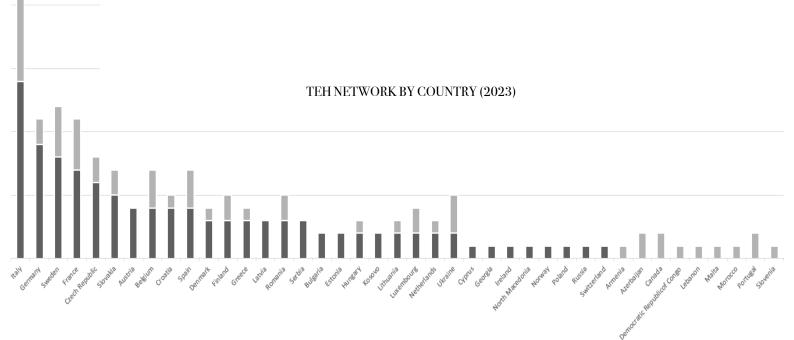
Analysis by country

Looking at the distribution of the TEH centres by country, we can observe that members are well spread over Europe, with most countries hosting one to three centres. Indeed, only few EU members don't host any TEH member, namely Malta, Poland, Portugal and Slovenia, showing the wide repartition of the network. TEH is however particularly present in Italy (14 centres) and Sweden (10). The Swedish predominance can be explained by the way TEH has, since its origins, developed tight relationships with the country, to the point of eventually moving its current headquarter in Lund. The Italian majority is less clear: while most of the concerned centres are direct results of the intense industrial development of the Po River plain, we don't witness the same prevalence in equally industrious regions such as Northern France, West Germany or the United Kingdom which only gather four centres despite being an infamous industrial cradle.

Analysis of the built assets

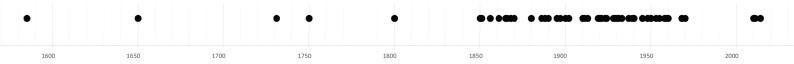
Looking at the TEH built stock's **construction years**, also gives a sense of an extremely layered knowledge and of the capacity of cultural centres for a wide array of adaptation techniques/strategies. While most centres are located in buildings constructed between 1850 and 1950 (the "industrial" century), the network exists within a relatively wide range of typologies which highlights the TEH network's capacity of adapting many different manifestations of European's industrial heritage, from its earlier forms (19th century's flour mills, small workshops etc.) to its more extensive coal then oil-based forms (large scale factories, mining infrastructures etc. developed through most of the 20th century). The great "agility" of cultural centres' transformation skills (achieving similar outcomes despite very distinct architectural/historical circumstances) is further highlighted by the fact that several members have also transformed/adapted buildings





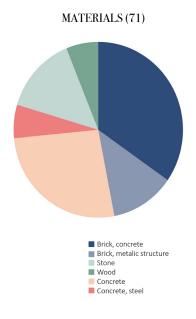
 $^{8\,}$ This inventory has been established based on a survey addressed to all of the TEH members through the year 2023. The answers to this survey have been completed, when possible, by a research through the available litterature. Not all centers have answered to this survey, nor every center that did answer responded to every question. The amount of repondants is indicated for each analysis.

CULTURAL CENTRES BUILT STOCK : YEARS OF CONSTRUCTION



dating from the late 18^{th} , all the way back to the 16^{th} century. Such buildings (churches, abbeys, forts, ...) have a distinct set of typologies and relations to heritage policies and socio-cultural attachments that distinguish them heavily from the rest of the centres.

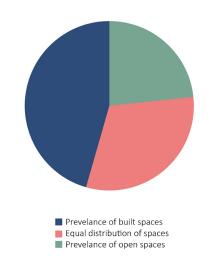
Looking more closely at the building's **typology** allows to extend this analysis. As expected, almost half of the surveyed centres occupy abandoned "industrial" buildings of various natures. On a second level we can the "infrastructural" (railyards, abandoned rail stations, ...), "evenemential" (abandoned cinemas, theatres, ...) and "service-related" typologies (schools, hospitals, sport venues, offices, ...). A minor number of centres occupy a wide array of typologies,



from agricultural (4%) or military sites (5%) to domestic or religio buildings (4% each). Again, the versatility and agility of cultural r generation as employed by the TEH network can be here observe showing its capacity to renew a great variety of built typologies co structed all along the $19^{\rm th}$ and $20^{\rm th}$ century.

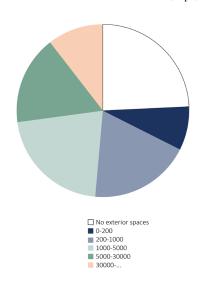
As building reconversion is considerably influenced by the built stock's construction materials, it is also interesting to characterize

RELATION BETWEEN BUILT/NON BUILT SPACE (90)



the variety of the cultural centres' built assets through their differences in building materials. Due to the industrial nature and time of construction of the majority of buildings, a predominance of mixed "brick/concrete" and "full concrete" structures while steel supporting structures are also extremely common. The use of materials such as wood and stone —related to an earlier era— are present but to a

EXTENTION OF EXTERNAL SPACE (mq) (37)



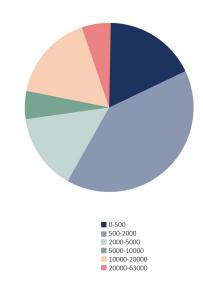
RENEWABLE ENERGIES (41)

Analysis of the built and unbuilt context

Another informative dimension to further characterize the TEH network resides in the size of their buildings and building plots. Indeed, the surveyed centres show a great variety of dimensions (some taking place in an area of barely 200m² while other extend beyond tens of hectares) nonetheless most TEH members take place in medium-sized areas between 500 and 2000 m². Those benefit from indoor spaces between 500 and 2000m² which are well suited to cultural and social events, artistic practises or local communities' gatherings, often allowing the presence of one or two major communal room (exhibition space, workshop, representation space, ...).

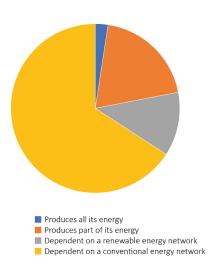
However, a number of centres stray from that description. About a third of the surveyed centres have the responsibility of much larger

EXTENTION OF INTERNAL SPACE (mq) (55)



indoor spaces, extending between 2000 m² (the smallest) and 20 000m² and up to 63 000m². Space dimensions bring specific opportunities/issues (and related knowledge) in terms of occupation, maintenance, regulations, and activity opportunities. `In terms of non-built/open space (absent for a quarter of the surveyed centres, at the risk of having a limited outdoor activity) a half of the surveyed centres exceeds 1000 sqm (allowing for relevant outdoor activities/skills) while a quarter falls below this figure. Centres whose open spaces extend between 5000 to 70 000 m² (parks, biodiversity reserves, fields, meadows, or forests) display particular skills in terms of biodiversity management and integration.

Looking at the **relation between built and open space**, the presence of members benefitting from extensive (over 30 000 m²) im-



portant outdoor space can explain why at least a fourth of the surveyed centres show a prevalence of open in comparison to indoor space. While most members show a predominance of built spaces, about a third show an equal distribution of built and open spaces, making for interesting opportunities and a certain "climatic agility".

Analysis of energetical performances

A final aspect that can help understand where the TEH network stand in terms of sustainable practises lies in the energetical performances and strategies they deploy. While the economic situation of most cultural centres remains precarious, and the reuse of industrial buildings can jeopardize attempts at bettering their performances, many TEH members show considerable efforts in the use of renewable energies (a quarter of the surveyed centres produces part of their energy) and budling insulation (three quarters of the centres have entirely or partially insulated their building stock.

INSULATION (42)

No
Partially
Yes

LESSONS FROM TEH: TOWARDS THE CONSTRUCTON OF A "WORKING" MANUAL

3.1 Tacit knowledge into play: TEH as precursor?

Drawing from these first explorations of Trans Europe Halles history, geographies and characters, one can observe that the network, over its 40 years of existence, has developed a "tacit" (Avermate et al., 2023)¹yet deep knowledge concerning cultural regeneration strategies of the industrial European built environment, a knowledge demanding to be unrevealed and valorised. "Tacit knowledge"² -also known as "experiential" or "tribal" knowledge- is a set of skills/abilities often difficult to explicitly communicate, spreading throughout an organization without being documented and possibly never actively pointed out or discussed. An implicit knowledge that can potentially be made explicit through some effort or reflection. Today, in light of the many challenges to come (for our built and unbuilt environment) and of the European Union's ambitious agenda for a "New European Bauhaus", lessons learned from the TEH expertise concerning the transformation/adaptation of a wide range of formerly industrial built stock seem particularly valuable.

This is a knowledge developed organically in time and somewhat involuntarily; each TEH member (and the network as a whole) is a community of practice³ that has grown and adapted through time within a trial-and-error methodology. This signifies that, while not two centres are alike, each has refined the way it occupies/transforms its built environment through continuous testing and prototyping in a way that similar public and private initiatives usually can't benefit from due to the limited economical and temporal frameworks they usually are subject to. TEH members have in common to operate with few to very few economical means, especially when compared to

As preliminarily shown in these pages, each centre has developed a specific expertise shaped by its local circumstances, a finely tuned answer to local political, socio-economical, and natural contexts as well as particular built typologies and architectural features inherited from past. As such, they each entail a set of opportunities to learn from on-site experiments fully integrated and adapted to the many European regional particularities. A set of expertise, skills, and know-hows however —more often than not—tacit; not always valorised nor necessarily acknowledged. This study tackles the needed to unveil this knowledge in the hope to both valorise it and to help more initiatives learn from it.

3.2 Building a "Working Manual"

To reach the abovementioned goal, we propose to design a first book (a "working" manual), intended as a set of "lessons to be drawn" from the many "cultural regeneration" prototypes led by TEH members in the last decades. Such lessons aim to contribute to a better understanding of what good practises of cultural regeneration can look like and how they could help shaping an ambitious New European Bauhaus. This in turn invites in the future to turn such lessons into a Manual of sorts, which is to say a set of principles and strategies that have proven efficient and sustainable which could be reproduced under similar circumstances as to contribute to the shift in paradigm which the NEB calls for.

This first book's lessons will be structured to highlight their contribution to the current discussion on the European transition towards sustainable architectural and urban practises.

The book's **first part**, which has been displayed in the previous pages, introduces the reader to the general aspects of Trans Europe Halles, its history, geographies and characters, and the relevancy of the network in the current discussion on the regeneration of the built

their public and private counterparts. A condition which has slowly evolved since the early 2000's, with the growing recognition on local and international levels of the network and its centres. Cultural actors compensate their precarious economic situation by a strong voluntary and creative workforce in their local communities, incremental changes brought to their environment in function of opportunities (specific grant calls, collaborations, surplus of volunteers or material ...) and a general attitude based on DIY and reuse strategies. Such practises show important and proven strategies of regeneration in tight economical contexts⁴ which could consistently contribute to many situations in Europe and beyond in the coming decades.

The concept of 'tacit knowledge' was formulated in 1958 by the Hungarian chemist and philosopher Michael Polanyi. Polemical in nature, it was part of an effort to refute the idea that scientific knowledge can be reduced to closed sets of statements or logical propositions. For Polanyi, scientific knowledge implied a worldly commitment on the scientist's part, manifest in the artisanal aspects of constructing experimental installations that involve the mastery of embodied non-explicit knowledge, or 'tacit ways of knowing'. Generally transmitted in non-verbal form, this implicit knowledge, constitute the basis from which explicit knowledge can emerge, and explain why one always knows more about a particular subject than one can put into words. Polanyi thus positioned tacit knowledge' that remains unspoken". (Ibid)

³ Educational theorist Etienne Wenger (1998, 2006), who has coined the term, defines Communities of practice as groups of people who share a concern or a passion for a topic, a craft, and/or a profession. These individuals deepen their knowledge and expertise through regular interaction with each other.

While those strategies show great potentials under many aspects, we however need to ackowledge they emerge from a place of endured constraints; while they may not cost economically as much as more conventional approach of reconversion, they may come to considerable costs for the energy, motivation and resilience of the communities involved and are not necessarily sustainable on the long-term. In that sense, the interest we carry here for these strategies should not be confused for an advocacy of a model to be applied as such, but rather as a set of practices which need to be supported and sustained by sustainability policies.

environment.

The **second part** constitutes the core of such lessons, displaying a selection of concrete strategies developed throughout the TEH network. This selection is organized in four categories, each addressing a specific set of stakes within cultural regeneration strategies. The first, MATTER MATTERS deals with strategies addressing the radical reuse of materials and built assets, the (re)distribution of matter and space in service of local communities and the refusal to "build more", in keeping with Malterre-Barthes' call for a global moratorium on (new) construction (Malterre-Barthes, 2024). The second, OUT OF THE BOX includes projects and spatial strategies displaying experimental approaches to urbanism and architecture which thwart expectations and known codes (Bouchain et al., 2014). Strategies which tend to reinvent relationships between the actors conventionally involved in the building process (owners, architects, contractors, residents, users etc.) in ways that break down the usual hierarchies and allow for more collaborations, co-conceptions, and co-constructions. The third, TIME, TIME, TIME features strategies integrating a plurality of temporalities within the design process (Morton, 2015). This displays articulations between different conceptions of time as well as different uses of time, from the very short (implementation of ephemeral events/approaches) to the very long (approaches going beyond strictly human temporalities and entailing long term processes as the regeneration of an ecosystem, for example). Finally, NEW COEXISTENCES address strategies that actively contribute to a redefinition of the divides that modern rationality has constructed between the cultural and the natural, the social and the biological, the human and the non-human, towards a "new biopolitical project" (Vigano, 2023). Such initiatives feed important discussions on the role of architecture, urbanism and landscape design towards a more inclusive project concerning living entities and bodies in space. Space is here designed as to weave new relationships between living beings which in turn become a powerful reservoir of possibilities for subjects to emancipate themselves, beyond the human/non-human divide. As such, this second part of the book consist of a first set of concrete lessons from the TEH centres on "cultural regeneration" as a shareable knowledge.

The **third part** brings together the fruits of three short-term experimental projects (Prototypes) carried out within the "Rebuilding to Last" research project. The aim of these projects (carried out in the form of workshops) has been to explore the "scalability" of a series of eco-socio-spatial strategies launched by cultural centres at the urban/territorial scale and for a larger public (human/non-human). The **fourth part** stems from the previous ones to draw a "roadmap and toolkit" aiming at helping any actor initiating a cultural centre initiative within a "cultural regeneration" framework.

This book builds aims building a first important step towards the construction of a TEH NEB MANUAL which could arise from further enquiries on the TEH network (and comparable initiatives). As such, we believe that these lessons could fundamentally contribute

to a concrete and ambitious furthering of what the "New European Bauhaus" could look like and how we could achieve it in a systematic way. While this publication is only a stepping stone towards this goal, it is an essential one that roots itself within long-term, situated and applied strategies. Giving a broad and public life to such innovative and further looking experiences constitutes the beginning of a wide and important Research Program that shall contribute to a truly sustainable Europe both in spirit and action.





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