

material components, but above all by the set of socioeconomic, cultural and emotional relations integrated in their socio-spatial dynamics. The social sciences and humanities have a central role in decoding these relations, whether due to their broader understanding of the phenomena, or in their translation, leading towards a basis for interdisciplinary dialogue and more equitable solutions for all. Their recent connection to green and sustainable city agendas, as provided by the Green Deal, confirms their benefits: these include verification of whether and how sustainable solutions can generate new values for nature, promotion of the presence of more diverse and plural voices, and working towards more inclusive solutions for all. Through systematic social research, the changes that occur in the experiences, practices and production of pre-existing space can be better evaluated, as, for example, in sociological studies on urban practices capable of identifying common behaviours and practices (Goffman, 1963, 1974; Certeau, 1990; Serpa, 2013, 2017; Pereira e Teixeira, 2015; Tenório, 2012), as well as gender gaps in ecological and sustainable attitudes and practices. The observations of where, which and how bodies move, talk and perform in cities are able to inform everyday dynamics and help build an archive of the common everyday that often builds a sense of place. Methods drawn from the social sciences and humanities strengthen citizen involvement in climate and environment-related issues and domains (Scholte, Teeffelen and Verburg, 2015; Buchel and Frantzeskaki, 2015), as they can ensure better strategies to engage the wider community in effective behavioural changes and civic participation towards a more holistic and just transition. This session aims to include presentations (theoretical review, case studies, data analysis, project results, artistic performances, among others) from a wide variety of inter and multi-disciplinary backgrounds that will further inform discussions on the added value of methods coming from the social sciences and humanities to enhance the impact of NBS.

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1B.1 - Inclusion: mapping indicators, contributions to the definition of new urban policies

Lia C Ferreira (0000-0002-4405-6431), Alexandra C Paio (0000-0002-4144-8499)
University Institute of Lisbon, Portugal

Reflection on alternative city models, such as smart cities and 15-minute cities, put the focus of sustainability on passive and active mobility infrastructures or pedestrianization. Models have succeeded disconnected from the real people, analyzed and respected in their diversity.

Modern, post-modern, industrial and post-industrial cities have reinforced the idea of the standard human being, a fact which generates inaccessibilities and dependencies. According to Hahn (1986) referred to by Gleeson (2001) the built environment is designed for the average human being. Beck Rails (1998) characterises the modern city as an apartheid architecture structured not primarily by racist prejudices but on the security of the 'productive elites'. The discourse around humanist cities is recent in international politics, as Kempin Reuter, T. (2019) advances.

The concept of inclusion falls within the contemporary framework of political, social and economic strategies. International treaties challenge territories to respond to issues of 'right to the city' and 'rights in the city' underpinned by the fulfilment of Human Rights (1948). However, this approach to combat discriminatory design has political and instructional limitations (Gleeson, 1999).

The Liang, et al. (2021) paper "Mapping Key features and dimensions of the inclusive city: A systematic bibliometric analysis and literature study" it is shown that inclusion is multidimensional and comprises spatial, social, environmental, economic and political dimensions, essential in participation, equity accessibility and sustainability in cities. An integral part of the 2030 Agenda that presents 17 Sustainable Development Goals, where the construction of inclusive environments is promoted.

In general, these issues have been addressed using planning methodologies and building regulations that aim to prevent, or at least reduce, the production of inaccessible environments and transport systems. Gleeson (2001) recalls that Imrie (1996) and Bennett (1990) have shown, through the context of Great Britain, that these regulations are often poorly applied.

In this context, the great challenge lies in implementing solutions that address correct and deeper assumptions than the mere application of regulations. The Urban Agenda for Europe proposes participatory methodologies, with a special focus on sustainability, gender equality and inclusion of vulnerable and at-risk groups.

This study presents the preliminary results of a mapping of universal accessibility indicators, as a contribution to the definition of new urban policies promoting prosperity, sustainability and socio-territorial cohesion. It is an opportunity to balance interests among stakeholders and create public value.

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1B.2 - Nature-based Play

Sara Candiracci, Larissa Miranda Heinisch, Dasha Moschonas, Spencer Robinson
Arup, United Kingdom

Play is essential for children's well-being and happiness. Play amongst nature is especially powerful in supporting children's cognitive, emotional, and social skills (Children & Nature Network, 2017). Natural spaces allow children to explore, feel safe, and form attachments with other people and the environment. But it is not just children who benefit. Urban green spaces can have intergenerational benefits by tackling age-related inequality and building resilience (European Environment Agency, 2022). Parks and nature create a sense of community where people of different ages and backgrounds come together.

These benefits are under attack. Increased urbanisation places immense pressure on ecosystems, contributing to the climate crisis and biodiversity loss (UNDP, 2017). In turn, it is increasingly difficult for children and others to develop and maintain meaningful contact with nature, and to play freely and safely. In fact, children's play is being edged out of the modern city, and it is the most disadvantaged children who are disproportionately affected (Arup, 2021). Therefore play, just like climate change, is a social justice issue.

The interrelationships between play, nature and climate resilience are powerful. By integrating them, we can chart a course to healthier, more playful, and more resilient urban environments. Yet, nature-based solutions (NbS) practitioners are not necessarily considering play in their design, nor are public space and policymakers aware of how NbS can be playful. Our research bridges these two perspectives, highlighting the co-benefits of nature-based play for people and the planet.

We undertook a cross-sectional, descriptive study of 12 design projects that combine nature-based solutions and playful design. The projects represent diverse geographies, actors, and scales. They include a city-wide approach to nature-based play (Barcelona), a suburb masterplan (Auckland), a natural habitat preservation area (Guatemala City), natural playgrounds (Rotterdam, Fortaleza), a civic centre (Toronto), schoolyards (Berlin, Amsterdam), a street (Auckland), a private development (Ghana), an adventure centre (Upminster), and a public garden (Salford). For each project, we analysed project drawings and images and conducted remote interviews with implementers to identify key drivers and impacts, and to influence other cities around the world.

The study characterises specific design approaches and engagement activities that lead to co-benefits from nature-based play projects, for communities, nature, and the climate. They are divided into eight categories:

- 1-Transform perceptions
- 2-Enable proximity and access
- 3-Strengthen partnerships
- 4-Diversify play through nature
- 5-Connect with play heritage
- 6-Celebrate change
- 7-Experiment publicly
- 8-Grow facilitation

These categories – and the activities within them – support actors to make informed, context-relevant decisions when delivering nature-based play solutions for children's wellbeing and climate resilience. Drawn from diverse contexts and scales, they have strong applications in different places. The various benefits of nature-based play