

Accessibility and Conservation in Historic Gardens

The Accessibility Plan for the Boboli Garden

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Abstract

Accessibility to cultural heritage is currently one of the primary challenges for policies concerning the protection and enhancement of historic landscapes. In monumental historic gardens, which embody significant historical, symbolic, and landscape values, accessibility cannot be addressed solely through regulatory frameworks or standardized technical solutions; rather, it necessitates an integrated approach that reconciles conservation and use. Although, the relationship between accessibility and conservation in cultural heritage has often been framed as oppositional, with access measures perceived as potential threats to authenticity. This paper challenges such a dichotomy, arguing that accessibility and conservation are complementary aspects of heritage management. Contemporary international frameworks, including ICOMOS, UNESCO, and the Council of Europe, increasingly recognize human rights and user diversity as core principles, emphasizing that cultural heritage acquires value only if it is experienced and interpreted by all. Historic gardens, in particular, present unique challenges due to their spatial complexity, ecological dynamics, and historical layering, where physical, perceptual, and cognitive barriers coexist. This paper presents the Accessibility Plan for the Boboli Garden as a pilot initiative aimed at overcoming the assumed conflict between accessibility and heritage preservation in historic garden. The Plan advances an interdisciplinary and incremental conception of accessibility, understood not merely as the removal of architectural barriers, but as a cultural strategy designed to ensure that diverse audiences can engage with the meanings, content, and values of the historic landscape. The Boboli experience is framed as a methodological laboratory, offering a transferable model for other historic gardens.

Keywords: Accessibility, Historic Monumental Gardens

Accessibility and Conservation in Cultural Heritage: A False Conflict

In the international theoretical debate, the relationship between accessibility and conservation has often been framed in oppositional terms, as a conflict. The introduction of access facilities has been perceived as a potential threat to the authenticity of heritage assets, fostering widespread skepticism toward inclusive policies. This attitude is based on a static conception of conservation, understood as the unchanging preservation of an idealized historical configuration (Treccani 1998).

Recent international discussions have increasingly questioned this approach. Organizations such as ICOMOS, the Council of Europe, and UNESCO have developed guidelines, recommendations, and conventions that, while respecting the conservation of cultural

heritage, place the visitor at the center. Human rights and the diversity of user profiles are now recognized as fundamental principles in the management of cultural sites. Although inclusivity and accessibility for all were once considered marginal and primarily associated with tourism opportunities, today cultural heritage cannot be separated from the people who experience and interpret it. It acquires value only if it is usable by everyone.

The Florence Declaration on Heritage and Landscape as Human Values (ICOMOS 2014) emphasizes the dynamic nature of the historic landscape, conceived as the product of an ongoing relationship between communities and territory. Similarly, the Ename Charter for the Interpretation and Presentation of Cultural Heritage Sites (ICOMOS 2008) asserts that understanding the meanings of a heritage asset is an integral part of its protection, highlighting the central role of interpretation in the valorization process.

It is therefore crucial to facilitate the interpretation and comprehension of sites and, in instances where physical access is restricted for reasons of conservation, security, or cultural sensitivity, to provide alternative off-site access solutions, including digital platforms, virtual reconstructions, and mediated experiential pathways.

Ensuring access for the widest possible audience entails not only permitting physical entry to a site but also fostering a meaningful, informed, and autonomous experience that can engage individuals of varying ages, abilities, skills, and circumstances. From this perspective, accessibility goes beyond the mere removal of architectural barriers and encompasses the capacity to engage with cultural content, symbolic values, and the narratives embodied in the heritage asset.

For a long time, the activities of institutions responsible for cultural heritage protection focused primarily on the material conservation of assets, relegating their use to a secondary role. As Amedeo Bellini (2013) notes, a historical artifact loses its status as a cultural asset if it cannot be properly experienced. Accordingly, use should not be regarded as a subsequent or subordinate phase to conservation, but rather as an intrinsic component of the asset's cultural value. Protection and use are therefore not opposing imperatives but complementary aspects of a unified process of enhancement. This paradigm shift is particularly significant in historic gardens, complex and stratified spaces in which spatial, sensory, and symbolic experiences constitute an integral part of their cultural value.

The perceived tension between accessibility and protection can thus be understood as a false problem, stemming from a reductive interpretation of both concepts. Conservation that excludes large segments of the population risks transforming heritage into a self-referential object, whereas accessibility pursued without a coherent cultural framework risk being reduced to mere technical compliance. Overcoming this dichotomy requires recognizing accessibility as an integral component of dynamic conservation, capable of balancing the safeguarding of historical memory with broader social responsibility (Picone 2004).

Accessibility Challenges in Italian Historic Gardens

In Italy, the main regulatory framework for the removal of architectural barriers is the Piano per l'Eliminazione delle Barriere Architettoniche (PEBA)¹, introduced by Law no. 41 of 1986. The PEBA was established to identify and plan interventions aimed at making buildings and public spaces accessible, within an approach largely oriented toward compliance with dimensional and performance standards. While this instrument has played a crucial role in raising awareness of accessibility, its limitations become evident in contexts

of cultural and landscape significance. Its predominantly technical and regulatory perspective tends to reduce accessibility to a matter of physical adaptation, often addressed through standardized solutions. In historic settings, this approach proves frequently inadequate or inapplicable, both because of conservation constraints, material or regulatory, and because of the complexity of the values at stake. This creates a double risk: either implementing invasive interventions that are inconsistent with the context, or renouncing accessibility in the name of a rigid and restrictive interpretation of conservation principles.

The development of an Accessibility Plan for monumental historic gardens should therefore be understood as a conceptual and methodological evolution of the PEBA, moving beyond a merely prescriptive approach (Lauria 2012). Improving accessibility in such complex environment requires a strategic guidance document that goes beyond identifying isolated measures for the removal of architectural barriers and instead articulates an integrated set of actions, assessed in relation to the specific context, available resources, and cultural priorities. Accessibility should thus be understood as a complex field of knowledge, involving expertise in architecture, history, landscape, urban studies, sociology, communication, and digital technologies, and calling for an interdisciplinary approach capable of overcoming sectorial perspectives.

Moreover, accessibility should not be considered a condition to be achieved once and for all; rather, it is the result of an ongoing process, subject to continuous monitoring, updating, and adaptation over time. This perspective is particularly consistent with historic contexts, where every intervention must be evaluated in terms of reversibility, compatibility, and cultural sustainability.

Monumental historic gardens represent a form of cultural heritage characterized by intrinsic complexity, distinguishing them both from historic buildings and from ordinary public spaces. They are simultaneously works of art, ecological systems, and experiential places, shaped by the continuous interaction between natural and built elements. Their conservation involves the management of living organisms and spatial arrangements in constant evolution, which makes accessibility a particularly sensitive issue.

In historic gardens, barriers to access are not limited to physical difficulties related to land morphology “fig. 1”. Slopes, changes in level, historic pavements, and stairways certainly constitute significant obstacles, but they are accompanied by perceptual, cognitive, and communicative barriers. Spatial complexity, the stratification of routes, and the lack of clear reference points can compromise orientation and the understanding of the site, limiting visitor’s autonomy.

Different types of barriers can therefore be identified. Physical barriers are linked to the material characteristics of the site and directly affect the possibility of movement; many of these are intrinsic barriers, as they derive from the historical and morphological features of the garden itself. In historic gardens, wayfinding plays a strategic role, since the legibility of routes and the clarity of information directly influence the quality of the visitor experience. An effective accessibility project must therefore address spatial intelligibility through coherent signage, orientation devices, and interpretative tools capable of guiding visitors without altering the character of the place. IN addition, topological barriers relate to the location of services and facilities. Perceptual barriers concern the difficulty of reading and interpreting space, particularly for people with sensory impairments, while cognitive barriers affect the understanding of information and cultural content.



Fig. 1. One of the steep slopes in the Boboli Garden (Mirko Romagnoli, 2022)

Addressing accessibility in historic gardens therefore means acknowledging the specificity of these contexts and adopting tailored solutions capable of integrating different needs without compromising the historical, landscape, and symbolic values that constitute their identity.

The Accessibility Plan of the Boboli Garden

The implementation of accessibility in historic gardens entails specific complexities, due to the diversity and heterogeneity of the sites. Steep slopes, articulated paths, and protected historic structures makes the adoption of standardized solutions difficult largely ineffective. In response, a two-phase methodology was developed:

Analysis Phase, a preliminary data-collection phase aimed at building an information framework to map: (i) levels of physical accessibility along individual routes; (ii) historical and cultural significance of points of interest; and (iii) the intelligibility of the internal circulation system (wayfinding).

Implementation Phase, a propositional phase in which corrective and improvement measures, both managerial and physical, are defined and detailed. The approach combines architectural interventions (strategic, ordinary, and maintenance-related) and management interventions.

When addressing accessibility issues in cultural heritage sites, and particularly in historic gardens, it is essential to assess whether can be overcome, or more often mitigated, through managerial strategies before intervening in the physical fabric. In this respect, digital communication technologies play an increasingly central role, as they broaden audiences and enhance opportunities for engagement with the visitor experience.

These solutions operate across two complementary domains: off-site information and on-site information. Off-site information allows potential visitors to understand site characteristics, constraints, and available services in advance, thereby supporting visit planning. The enhancement of the gardens' websites, in line with WCAG 2.1 standards, can significantly improve accessibility for users with disabilities.

On-site information, in turn, includes both pre-visit and in-visit content. The widespread use of smartphones and tablets, combined with GPS-based systems and indoor navigation technologies independent of mobile network coverage, now provides an essential support for spatial orientation. Dedicated applications enable users to access site-specific content and to explore virtual reconstructions integrated with augmented reality tools, enabling a more interactive and personalized experiences. Additional content can be delivered through proximity-based technologies such as QR codes, NFC, and BLE, allowing visitors to access extensive information directly on their devices. At the same time, these systems enable site managers to analyse user data and to refine services through a continuous feedback process. Any architectural intervention or physical modification must comply with three core principles: conservation, through close coordination with restoration and conservation experts; aesthetics, ensuring that accessibility measures do not compromise the visual perception of the garden; and functionality, by improving comfort, safety, and usability without undermining historical and landscape legibility.

The accessibility strategy for the Boboli Garden is based on a multiscalar approach that considers the city, access points, internal routes, and services as an integrated system. Urban infrastructure and transport networks constitute the first filter of accessibility, namely the site's reachability. The initial phase of the plan focuses on analysing connections between the city and the garden, including access routes, signage, public transport, and secondary entrances, to ensure clear, safe, and legible access. The functional masterplan provides for new accessible entrances, the reorganization of services, and the introduction of assisted mobility systems, including tactile routes, information supports, and digital tools.

Within the garden, the strategy translates into a network of differentiated routes calibrated according to levels of difficulty and physical effort, with particular attention to continuity and safety. Route design takes into account slopes, surface materials, path widths, and the availability of resting areas and accessible services. The Boboli case underscores the importance of considering the carrying capacity of paths and areas, acknowledging that certain sections cannot be adapted without compromising conservation requirements. The identification of "points of least resistance"² allows interventions to be prioritized where benefits are greatest and negative effects minimized (Secchi, Vessella 2023).

Each measure within the Boboli Accessibility Plan is designed to preserve the historical integrity of the site while introducing discreet solutions that enhance autonomy and safety. Key interventions include: a new entrance with centralized visitor services; solutions for the limited usability of gravel paths; the introduction of an internal electric mobility service; mechanized vertical connections at selected points "fig. 2" "fig. 3"; handrails in steeper sections; upgraded restrooms; adapted ticket offices and front desks; new ergonomic seating; accessible drinking fountains; temporary mobility mats; tactile maps and models; and routes equipped with proximity sensors for visitors with severe visual impairments. The project is not limited to mobility but aims to provide a comprehensive cultural experience through mediation tools such as multilingual panels, audio guides, and digital applications

foster active engagement and inclusive use, making the visit both educational and sensory for diverse audiences. Access to cultural and landscape content thus becomes an integral part of the visit, transforming Boboli into a testing ground for inclusive and participatory design. In this framework, the plan functions not only as a set of technical measures, but as a model of cultural design in which heritage conservation and the enhancement of the visitor experience converge in an integrated and sustainable way.

Outlook and Transferability

Integrating principles of diversity and inclusion is no longer optional; it is an ethical and technical requirement for the sustainable management of historic gardens and cultural landscapes. The challenge lies in balancing heritage conservation with the potential for new uses, without compromising the historical or aesthetic integrity of the site. The implementation of accessibility in historic gardens highlights the need for integrated approaches that reconcile conservation, aesthetic, and functional requirements with visitor experience. The Boboli Garden case demonstrates that effective accessibility planning involves not only physical modifications, such as adapted paths, entrances, and mobility solutions, but also managerial, digital, and interpretative tools that enhance understanding and engagement with the site.

A two-phase methodology, combining a general diagnosis of accessibility and cultural significance with a targeted implementation phase, provides a framework for identifying interventions with minimal impact and maximal benefit. The experience of Boboli also provides a replicable model for other historic gardens and parks in Tuscany, particularly the other UNESCO-listed Medici Gardens, as well as the broader system of historic open spaces in Florence's Oltrarno district (Viale dei Colli, Giardino del Bobolino, Rampe, Giardino Bardini, Giardino delle Rose, etc.). The impact of this approach is measured not only in terms of accessibility for people with disabilities, but also in the overall quality of the experience for all visitors.

Overall, accessibility emerges as an integral component of heritage management, combining physical, digital, and interpretative measures in a coherent, sustainable, and participatory framework. The Boboli Garden Accessibility Plan exemplifies how inclusive design can simultaneously safeguard historical and cultural values while expanding opportunities for education, engagement, and enjoyment for all visitors.

Notes

1. The Piano for the Elimination of Architectural Barriers (PEBA) was established under Italian Law No. 41 of 1986;
2. In the field of accessibility planning for historic and cultural environments, the term "*point of least resistance*" refers to zones within a building or landscape where physical modifications can be introduced with minimal impact on the heritage asset's integrity, spatial organization, and symbolic values.

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Fig. 2. The Palazzina del Cavaliere, one of the least accessible points of the garden, where the Accessibility Plan identifies a point of least resistance for the installation of a new elevator (Mirko Romagnoli, 2022)



Fig. 3. View toward the Florentine agricultural landscape, offered exclusively by the Giardino del Cavaliere (Mirko Romagnoli, 2022)

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