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# Historic Planting: A Contextual Approach for Heritage Precincts in India

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Historic precincts that should showcase plant palette of a particular period or region are today plagued by homogenization in softscape. This is probably because planting for historic precincts has not received adequate attention from the purview of authenticity, aesthetics and availability of appropriate plant material. For projects where replanting exercise has been taken up, there is at times a lack of clarity on appropriate methodology of on-site execution.

Conservation efforts for innumerable heritage projects being undertaken make it imperative to address planting for historic precincts with greater urgency. Decision-making regarding planting at historic precincts should be informed by thorough background research and documentation related to plant palette, planting layout and its contribution to the overall ambience. An understanding of how planting was undertaken historically requires a critical analysis of the concept of authenticity and progression of the aesthetic character of the softscape.

Discussions around planting are gaining momentum, primarily through individual and a few institutional efforts, which focus on availability of indigenous species and sustenance of biodiversity. It is crucial for the process of research to concentrate on the cultural aspect of the softscape to reiterate the relevance of the vegetal component in the overall historic significance and ambience of the historic precinct.

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# 1. INTRODUCTION: THE IDEA BEHIND HISTORIC PLANTING

The idea behind this research was to bring planting to the forefront of discussions related to our historic environment. This led to preparation of guidelines that ensure that planting at historic precincts is a scientifically researched and executed endeavour that contributes to the historic ambience of the space.

## 1.1. OVERVIEW

In a country with 3,650 monuments of national importance (ASI), scores of sites are of regional or local significance, under the jurisdiction of multiple authorities, the recent surge in "projects" being proposed under the heritage or tourism sector has established the need for undertaking this research. As more historic precincts are taken up for conservation the need to approach historic planting with some level of refined scientific thinking is becoming an urgent requirement. The ephemeral nature of softscape, in the face of rampant construction at an incomparable scale, has led to irreversible loss. With it we ignore our treasure of horticulture knowledge and landscape archaeology in a nation that is a global repository of bio-geographical and cultural diversity.

The living aspect and its finite lifespan make planting a challenging subject. Though short-lived, plant material significantly contributes to the essence of a site and setting. Titillation of the senses through the medium of aromatic, productive, aesthetic and visual plant palettes have been inherent in garden styles that evolved in India.

However, our chequered religio-political history, an amalgamation of ideologies from the Hindu, Buddhist and Jain traditions followed by Islamic and subsequent Colonial overlays has imbued our cultural landscape with myriad, at times, contesting design ideas, principles and aesthetics.

To address planting in historic precincts today, on a terrain planted and replanted through time, the dilemma of what to consider historically appropriate may not have simple or direct answers.

In the last few years, discussions around planting are gaining momentum through individual or institutional efforts that address use and availability of indigenous species and sustenance of biodiversity, the focus however, remains largely ecological, not cultural. The need for an appropriate process of research and execution related to planting at historic precincts is crucial today.

# 1.2. CURRENT STATUS OF PLANTING AT HISTORIC PRECINCTS

Drawing on one's professional engagement with contemporary as well as historic landscapes, one wonders why the richness of our past no more informs the present. The current trend of manicured landscapes, our preference for lawns and ornamental planting, has become the predominant aesthetic of the time. The fact that this is now an acceptable approach towards treatment of our historic sites is a matter for worry.

The resulting uniform landscape overwrites a distinctive planting palette and design as an expression of the natural and socio-cultural context.

The preference for lawns and a particular manicured aesthetic goes back to India's colonial past. Why has this aesthetic lasted as long as it has, at least 120 years? Is this the only way to present the country's historic sites?

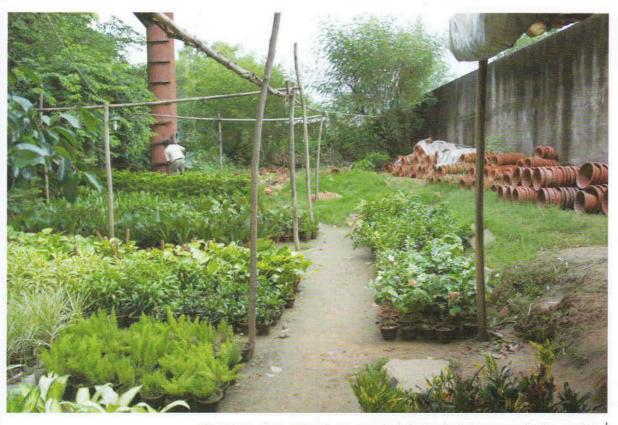


Fig. 1. Lost palette - Nurseries propagating limited and mainly ornamental plant material.

Green lawns, ornamental planting and reasonably maintained gardens are hailed as a commendable effort, today, as many historic sites discard their disorganized and untidy ambience. Thus, unknowingly a seal of acceptance has been placed by the general public towards this "clean and green" look.

Landscape Architecture in India today shows a serious disconnect with the treasure trove of aesthetics and experiences woven in our cultural landscape. The evocative plantscape recreated through the lyrical poetry of Kalidasa in the 5th century BC; the thematic classification of specific emotions with landscape typology in Tamil, Sangam literature, the *Tinnai*; description of gardens in the time of the Guptas, to more recent descriptions and nuances seen in Mughal miniature and further an understanding of late 18th century English "picturesque" gardens could

have each contributed to distinctive experiences in the historic environment further inspiring contemporary design aesthetics.

The failure to showcase the richness of our landscape can be read in the limited plant palette available in nurseries today. The historic or indigenous material is limited to medicinal nurseries or individual efforts to collect seeds from natural forests. A need of the hour is therefore to revive the lost palette and recreate the richness of our plantscape.

The research is dealt with in four sections. First, is relating to aesthetics in Landscape and next on the concept of authenticity. To take the discussion into the realm of landscape practice, which forms the core of author's experience, the next two sections introduce the concerns around plant availability and onsite execution for historic precincts.

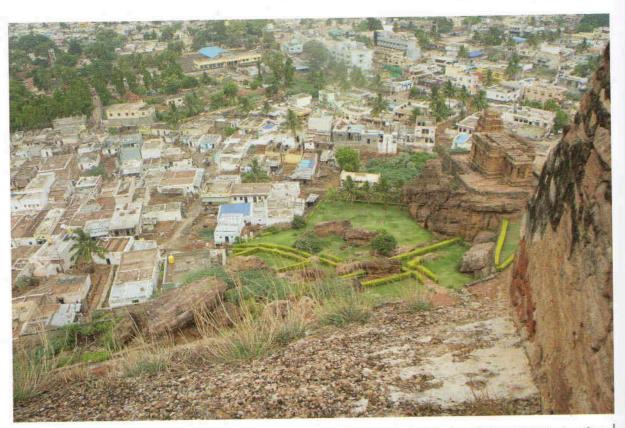


Fig. 2. Green desert in a brown oasis - Inappropriate planting at Badami World Heritage Site.

# 2. RESEARCH & DOCUMENTATION

This step in addressing planting at historic precincts is the basis of the landscape approach at site. As planting is short-lived, literature, art, memory are storehouses of information of how planting may have been in particular period(s).

The guidelines lay out how one should be using the information from these sources as they may not always indicate the landscape authentically using poetic freedom or representing a client's wish of how the landscape should have been rather than how it was actually.

# 3. PLANTING. AESTHETICS

The realization has not yet made a mark in landscape or conservation practice, that planting is in itself a complex layer which if undertaken sensitively and scientifically can potentially contribute to the historic ambience at site. As mentioned earlier, it is believed that the recent preoccupation with a manicured and ornamental softscape and lawn is a colonial hangover. Edward Said, in his discourse on Orientalism, states, "...the colonial tourist applied Western aesthetic paradigms to judge the landscape of his travels in the colony in general and in the Indian subcontinent...in the process of establishing the claims for their universality" (Said 2001).

Giles Tillotson, an architectural historian reiterates that places of tourist attraction were largely viewed through the prism of prevalent European norms of aesthetic appreciation. Delhi's ruins were incorporated in the ASI's archaeological parks. In some instances, where areas owned by Delhi municipality were dotted with monuments, they were simply incorporated as garden ornaments (Tillotson 1991).

This is quite evident in the context of the 14th to 16th century Lodhi and Sayyid edifices dotting the landscape of Lady Willingdon Park, renamed Lodhi Garden.

The Picturesque worked alongside the enterprise of botanical expansion undertaken by the British. The process of import, acclimatization, propagation and dissemination of plant material was taken up methodically which resulted in the addition of a new typology in landscape design, the botanical gardens. The British established a Botanical garden in Sibpur, Kolkata in the mid-18th century and then at Poona, Madras and Saharanpur. Today, India has approximately thirty botanical gardens, Pakistan, twenty and the United Kingdom boasts of more than forty. Botanical drawings, plans of Indian parks, ledgers from Colonial times chronicling activities in the garden and the region lie untouched in archives and libraries in these centres in India but also to be found at the India Office in London.

As no physical evidence remains or what remains has not wholly been explored, our reimagination of historic planting from earlier periods relies on literature, poetry and paintings of the time. Travelogues and notes from the period also assist in this understanding.

What are we looking to find in these sources? Often referring to context, such research may indicate the ambience of larger heritage precincts extending beyond garden boundaries. We hope to find mention of the layout and experience of the garden. While paintings may be indicative of a plant palette and design, they require careful visual analysis to accurately identify the components. Poetry or texts and scriptures may spell out the plants used or an approach to planting or more often the "spirit" of the garden.

We need to be aware that names mentioned or specimens drawn in literature and art, respectively may indicate multiple possibilities from the plant kingdom thereby compromising selection of authentic palettes. Poetic license requires that all text and art will have to be put through careful analysis. Another challenge is that poetry and prose may not necessarily mention specifics of location.

This source of information may not be adequate therefore to "re"create a garden due to its subjective representation. We have to understand that what has been creatively expressed may be the artist's personal interpretation of his environs, or manipulated to address the brief by the patron.

# 4. CONCEPT OF "AUTHENTICITY" IN PLANTING

A disconnect between top down and bottom up conservation is particular to India and other Colonies. The concept of aesthetics and conservation evolved in Europe and India along distinct routes. However, at the end of two centuries of colonization, intellectual discussions and formal conservation of historic sites is nearly synonymous in both contexts. This is often in conflict with how the community defines, associates with and protects its heritage in a traditional culture such as ours. Here change and upkeep of heritage defies purity of minimal intervention and authenticity of physical fabric as prescribed by William Morris for late 19th century England.

The discussion on authenticity of the vegetal component has been addressed from two perspectives:

First, how to define authenticity for vegetation in historic precincts in India, a concern engaging landscape architects, landscape



Fig. 3. Green desert in a brown oasis - Inappropriate planting at Badami World Heritage Site.

historians and horticulturists. Second, an appropriate approach to softscape conservation that contributes to the overall authenticity at site, which should inform conservation practice overall.

To begin with, the paper will look at some of the predominant issues confronting planting at historic precincts today.

### 4.1. AUTHENTICITY IN PLANTING VERSUS ARCHITECTURE

The conventional concept of heritage based on an agenda of preserving the fabric of monuments has now been critically transferred to the field of landscape (Turner and Fairclough 2009). However, this is inappropriate in the context of planting even if we loosely apply it to the hardscape component, pathways and all civil work elements (Singh 2007). Sales reiterate that it is impossible to apply objective authenticity in landscapes as the living components need to be

consistently managed, manipulated, harnessed, directed, trained, controlled, developed and renewed (Sales 2009).

## 4.2. CHRONOLOGICAL DISCREPANCIES

There are evident chronological discrepancies in a historic precinct, both between architectural structures and vegetation and within plantation itself. All of the components could have evolved in form and typology over different periods thus over different additions and removals undertaken at site. Such discrepancies have long been accepted in the case of architectural monuments as the natural consequence of piecemeal change, development of different parts of the building or complex in different periods over different time frames under different people. But this acceptance has not been extended to the analysis of gardens and parks. It is unfortunate to try and decree a uniform style for

the vegetation. This is being expressed in current conservation approaches as selecting particular periods of garden evolution and "re"creating the softscape to that style. Most heritage tourism projects would unfortunately fit the bill today.

# 4.3. PLANT ORIGIN

We have been in the midst of trade and cultural contacts over the last two millennia. This exchange draws a very fine line between indigenous and naturalised species, one that may be found only on our soil and another which are acclimatized and established their own ecosystem. Along history of exchange makes it especially challenging to identify "authentic" varieties and label them accurately in the plant palette available today.

Another challenge with plants is that the period during which the plant is able to represent the principle of the original substance is often shorter than the length of its existence (Pejchal 2011). To elaborate, a newly planted landscape could never be perceived as authentic, gaining acceptability only on maturity. The period for which it would be considered authentic comprises of a short duration over the entire lifespan of the softscape.

# 4.4. LIKE FOR LIKE REPLACEMENT

This approach has limitations in the case of planting.

A major impediment in locating the same or what we may refer to as original plant palette is matching the name with exact material. Along with it the time period and region where it was used, its date of introduction and a morphological description and identification may prove challenging (Busch 1995). Where only the hardy trees have survived the entire scheme can be misrepresented. Contrary to this if no tree or pit is indicated on site it may be misleading. In order to address these myriad possibilities, researchers have used multiple approaches to classifying authenticity.

Globally, the bottom-line is preserving the principle within the component (Pejchal 2011). The primary goal may not be to preserve the specific vegetation elements but the principle included in them, constantly presented in new generations of plants.

In India, we may find the situation is contrary to this. First, the loss of our plant wealth and knowledge is acute, catalyzed by colonial aspiration and now by global homogenization. Second, our built heritage is a product of craftsmanship and materials, both of which are still available for repairs hence our approach towards buildings is becoming more in line with respecting the associations in place of the rigorous purist Western approach.

Our approach towards maintaining authenticity of planting may not be in line with either the architectural conservation approach in India or the garden conservation approach of the West.

In India, not much thought is given to planting in contemporary or historic precincts. Second, the indigenous plant palette, as elaborated earlier, is very nearly lost from an ecological but also a landscape aesthetics point of view (it may be partly accessible for medicinal purposes). Third, due to multiple layers of historic interventions, usually there is barely any garden that still showcases its original trees, within the purview of as long but disrupted history as we have.

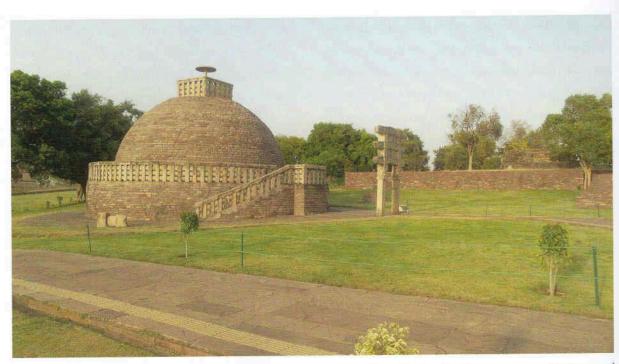


Fig. 4. Sanchi - Creating non-contextual landscapes.

From a practical perspective, if we do not use it, the nurseries will not stock it. Commercially, historic planting has the potential to encourage use of a diverse palette extending beyond the limited plant material existing today. This may initiate a much needed change in plant choices in contemporary landscape practice.

# 5. AVAILABILITY AND ACCESS TO PLANTING MATERIAL FOR HISTORIC PRECINCTS

Plant nurseries have one of the most significant roles to play today in initiating appropriate planting at historic precincts. However, in the current reality, they also offer the biggest road block to the endeavour of sourcing historically relevant material. Catering to a market driven by ornamentals and exotics there is little place for the indigenous or endemic. This transformation is very time intensive and most of all demands a larger vision to "re"create our lost landscapes.

Despite having a wide network of government funded institutions for horticulture,

forestry, medicinal plants, both for research and propagation, the bulk of the commercial market is served by private nurseries.

It is noteworthy that many of the historic sites under the jurisdiction of New Delhi Municipal Corporation, and Municipal Corporation of Delhi have an on-site nursery located within their premises. This is often for ease of maintaining the large expanse of gardens, parks, erstwhile historic spaces. However, the material they stock is very limited, almost entirely ornamental.

# 5.1. PLANT AVAILABILITY

Availability of species to the specifications and numbers required for historic projects are significant hurdles in the final execution of a planting scheme on site. Contemporary projects have been addressing these problems by setting up pre-procurement and pre-grown nurseries in the vicinity of site or at the site itself. Plants are identified all over the country and required material is procured one to three years before the date of completion.

It needs to come from a nursery with similar soil constitution and a non-polluting, preferably organic propagator so that no new chemicals are introduced in the landscape. In the current scenario, this seems like a tall order. But each of these sets best practice in place for planting at historic precincts.

# 6. IDENTIFICATION AND TRAINING OF CORE TEAMS

The composition of team plays a crucial role in defining the approach towards planting at a historic precinct. Expertise in the Indian context in landscape conservation is still limited. Involvement of a historic landscape architect (or landscape architect), garden historian (or historian), horticulturist and ecologist lend different perspectives to research and documentation, selection of plant material, sourcing of plants and on site execution, stages which have been discussed in the previous sections.

# 7. ON SITE EXECUTION

One of the main distinctions in the execution of historic landscapes, in comparison with contemporary landscape architecture is the requirement to check back on conservation principles at every stage and for every decision. One can be creative but within parameters already set out by established or on-going research. This makes it both challenging and limiting to some extent.

### 7.1. TENDER AND SPECIFICATIONS

Identification of plant palette is a significant aspect for site execution. This is a crucial stage of negotiation, which requires balancing the aspirations of authenticity between the ecologist

(who wants to ensure that the plants are not invasive), an art historian (who recommends that plants that find reference on the built fabric or its history should be given precedence), a conservation architect (for whom the view of the building should not be obliterated), the client (who requires that plants should be easily available and maintained), a gardener (who requires that the variety should be familiar to him), a landscape archaeologist (who mandates that the species should not interfere with subterranean heritage) amongst others.

### INTERPRETATION

We are a culture of story weavers. But our landscapes have ceased to tell their stories relying today on a uniform narrative. Interpretation is a very useful tool for landscapes especially where enough research material is not yet available for work to be undertaken on site. There may be other reasons for the decision to leave the garden as such, such as paucity of resources, political will or ownership issues.

Interpretation allows for showcasing transformation, fashions, preference over several periods related to planting, which undergoes changes easier and more frequently than built fabric.

Interpretation is a useful tool as a first stage introduction to planting as it is predominantly reversible. This offers an alternative to the "temptation" of planting at site to "improve" presentation in the initial phases of the project without giving time for a research-based approach.

Interpretation is also useful as it offers the possibility of revising the approach or adding to the body of information discovered along the way. Being ephemeral, discoveries related to planting



Fig. 5. Planting without a vision - Jai Vilas Palace, Gwalior.

rely intensively on secondary sources. Locating and verifying information takes time. Therefore, in place of considering planting as a means of greening the site, it should be given appropriate time for research. Plant material is also not easy to come by and needs to be diligently sourced and propagated. In this context, brochures, signage, content for walks, etc. can be the used to narrate planting history. They also leave scope for multiple revisions without severely impacting site ambience or budgetary allocations.

#### 8. MAINTENANCE

Training personnel for handling historic sites plays a significant role in quality management. Maintenance practices at a historic site need to be sensitive to the overall vision as well as address onsite challenges. How to ensure upkeep of plants in summer with acute water shortage are critical issues. How to have a replacement system in place? Back up plants should be 100 % of the nos. used onsite or less? Training and sensitization of the staff as to what to plant, how to plant, when to plant, where to plant are important. The do's and don'ts of daily, weekly, monthly and annual calendars need to be built into the maintenance system.

#### 9. MONITORING

Monitoring in this context is also very important as to which plants are thriving and which are not being able to establish on site. With new discoveries emerging out of both botanical and historical research, the planting policy needs to be continually informed. For a conservation-based approach this is an important step in the cycle of research based planting at site. A continuous check with regards to the plant palette, sourcing

of relevant planting stock, logistics of propagation and availability at the nursery, on site planting approach, altogether need to be monitored as a mandatory part of the life cycle of the landscape.

What is crucial to this cycle is appropriately trained manpower to execute the vision as laid out by professional experts in collaboration with the various stakeholders on site.

## CONCLUSION

In the quest for global equality, we find that the future of distinctively designed contextual landscapes and planting in India is presently quite bleak.

Planting at historic precincts must be informed as much from the past as it is from the present. The debate of historic planting will remain a one sided affair unless we can actively engage as nursery men, horticulturists, historians, enthusiasts and designers, landscape architects

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and mostly concerned citizens to raise awareness regarding our soon to be lost landscape heritage.

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