UC Berkeley

UC Berkeley Previously Published Works

Title

LEAPING BRIDGES, FORKING PATHS

Permalink

https://escholarship.org/uc/item/00b0v8pp

Journal

LANDSCAPE ARCHITECTURE MAGAZINE, 101(8)

ISSN

0023-8031

Author

Kullmann, Karl

Publication Date

2011

Peer reviewed

Leaping Bridges, Forking Paths Notes from the 2011 Xi'an World Horticultural Expo

Karl Kullmann 2011. *Landscape Architecture Magazine* 101 (8): 98–110

One year after the Shanghai World Expo and three years after the Beijing Olympics, the Xi'an International Horticultural Expo once again leverages the fortunes of a Chinese city by investing in a megaspectacle. Unlike the Olympic Games, the World Horticultural Expo is not a single event that globally migrates on a set schedule. Rather, several different shows are authenticated by the International Association of Horticultural Producers and scheduled with varying regularity in Asia and Europe. Other notable decennial incarnations include the Netherland's Floriade and Germany's Internationale Gartenbauausstellung. Located at the northeastern periphery of the ancient city of Xi'an, the 2011 incarnation is China's second after Kunming in 1999. The site, open from April to October, is geared up for 12 million mostly domestic visitors; such is the scale of internal tourism in a country with 20 percent of the global population. In a familiar 21st-century Chinese scene, the surrounding alluvial farmland is quickly being converted into a regional financial center, with 250 acres of commercial floor space under construction.

Located near the confluence of the Chan-Ba and Bahe Rivers, at 1,000 acres the Expo is the same size as San Francisco's Golden Gate Park. The site was originally a sand quarry and has been remodeled into a quasi-picturesque system of weir-controlled lakes, around which are strung the individual garden exhibits. Following the familiar exposition garden strategy of attempting to encapsulate the exotic essence of other places, most exhibits reference either a particular



country or Chinese province. As is to be expected at a garden show, the direct representation characterizing many of these efforts results in a reductive set of signs with little depth and a lot of kitsch. However, within this context, two clusters of gardens avoid parochial simulacra and tap instead into a richer vein of garden metaphysics.

The first grouping is a collection of commissioned gardens from nine internationally distinguished landscape architects and the studios that they direct. Appropriately named the "Masters," these gardens include contributions by Stig L. Andersson (SLA), Adriaan Geuze (West 8), Eelco Hooftman (Gross.Max), Catherine Mosbach (Mosbach Paysagistes), Martin Rein-Cano (Topotek 1), Martha Schwartz (MSP), Vladimir Sitta (Terragram), Benedetta Tagliabue (EMBT), and Wang Xiangrong (Atelier DYJG). The second cluster comprises gardens designed by professor and graduate student teams from 10 internationally invited design schools. The University Gardens, directed by the University of Southern California American Academy in China under the banner of "Creative Nature," also include the work of the Architectural Association (UK), Columbia University, University of Toronto, Hong Kong University, Peking University, Feng Chia University (China), University of St. Joseph (Macau), Universidad Torcuato de Tella (Argentina) and my own school, University of California, Berkeley.

This article discusses six gardens—including the author's own design all of which employ garden thematics associated with the labyrinth and the grotto—of hiding and revealing, voyeurism, exotica, minutiae, and narrative.

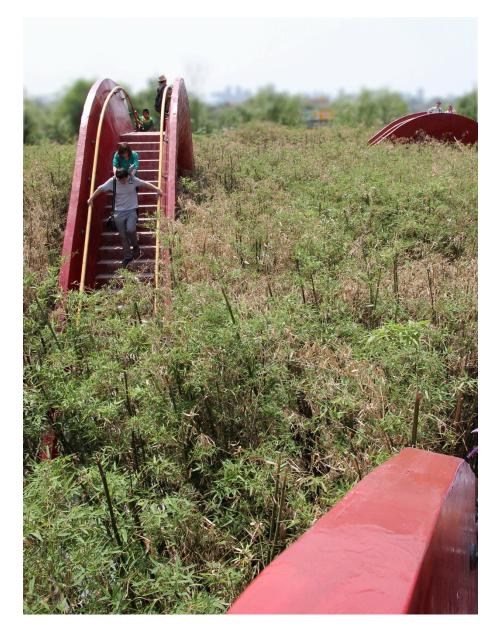
The Maze Garden - Martha Schwartz (MSP)

Formed by a sequence of high grey brick walls repetitiously punctured by passages, the Maze Garden is essentially an open labyrinth where the visitor can move freely in the x and y axes within the matrix. However, embedded within this navigable system are a series of spatial subversions and cognitive deceits that lend the garden its nuances. Each pair of transverse walls hides a line of willow trees, which, although visible as canopies, can never actually be reached,



because the voids they occupy are bypassed by the transverse passages. The effect is destabilizing, since any attempt to locate the willows results in the visitor being fed through into the next open, unvegetated space. Within this pattern, the main walls subversively rotate from an orthogonal alignment at the entrance to diagonal at the rear, a maneuver that creates niches at the premature ends of some of the elongated passages. These chambers are part of a larger trap set using dark mirrors that clad the inner walls that frame the maze. Tapping into predictable human vanity, the mirrors in larger areas lure visitors into indulging in their reflections close up, while smaller chambers incite more intimate interactions.

It is not until some—but not all—visitors find passages that punch through into an L- shaped chamber at the rear of the maze that the contrivance of the design is laid bare. At the apex of this space, a stand of willows is finally exposed in full, although the grove remains semiillusive behind dark glass. As people follow around to the left or right, the final revelation is transmitted: they are confronted with the realization that the mirrors in the maze garden that they had been serenading minutes earlier are one-way glass. From behind the



looking glass, as it were, it is now possible to become the voyeur of hordes of people unwittingly consuming their reflections. Like unsuspecting subjects in a social experiment, the visiting public has been ensnared in a cunningly contrived ambush using vanity as the lure.

The Garden of Bridges – Adriaan Geuze (West 8)

Next door to the Maze Garden, the Garden of Bridges references a more primeval embodiment of the labyrinth as a single path that spirals inward and then outward to enclose a complete cyclical journey. Whereas contemporary mazes tend to include abundant choices and dead ends, the ancient spiral-labyrinth tracks a more fatalistic life passage. The Garden of Bridges essentially entangles this motif of the single path into a knot to create an unexpected conflation of complexity with lack of choice. Walls are substituted with a dense thicket of bamboo, into which a twisting narrow trail is cut. Through much of the site, the depth of bamboo obscures the middle ground, although in instances where two segments of the path come into proximity, filtered glimpses of other people are revealed. Where the path loops back over itself, iconic arching red bridges grade-separate the intersection. At the core of the concept is the contrast between being immersed in the bamboo forest and being exposed at the top of the bridges. At ground level the experience is very tactile and disorienting, while up above the canopy the clear overview has the landmarks of the Expo as bearings. The deception is that the orienting benefits of the overview at the top of the bridges are erased once you inevitably descend back down into the forest. Because the path below remains obscured, the overview is useful neither for reconciling the route taken so far, nor for planning the course out of the labyrinth.

The Big Dig – Martin Rein-Cano (Topotek 1)

The Big Dig clears out its site and partially opens up the frame so that the entire garden plot is revealed to the onlooker. Within a quarteracre of artificial grass, two primary elements are visible: a small booth that shields an audiovisual display and a curious circular balustrade. The crux of the concept is hidden within this field of view, but below ground. A large parabolic hole situated within the balustrade plunges down to depth invisible to goose-necking onlookers, creating the impression of an endless void. The concept embodies the saying to "dig a hole down to China" that appears in the lexicon of many societies around the world, despite the fact that not all of them



actually occupy a pole opposite China. A soundscape of other cities, derived from the film *Koyaanisqatsi* is piped up from the depths of the hole and simulcast on the nearby screen, heightening the illusion of the tunnel's boring right through to the other side of the world.

The Botanist's Garden – Eelco Hooftman and Bridget Baines (Gross.Max)

The Botanist's Garden employs walls to form a series of thresholds that choreograph the visitor's procession deeper into the garden. At the core of the site, a secret circular cloister is enclosed by a thick battered wall constructed of tightly tessellated clay tiles, which appear to quiver in the sunlight. The geometry and sheer bulk of the wall act as a sound sink that absorbs the cacophony of the surrounding Expo. Within the silenced outdoor room, collections of exotic and aberrant botanica are scattered, each to be indulged as a constellation of individual specimens. This focus onto the minutiae presents an acute shift in scales from the mass floral displays that characterize much of the rest of the Expo site; it fosters a type of vision that is close at hand and engages the body, in that it typically involves crouching and kneeling to get a closer look.



The Labyrinth in the Mountain – Benedetta Tagliabue (EMBT)

The Labyrinth in the Mountain garden also employs the minutia of detail through intricately crafted bamboo installations. An oversized grass, bamboo has extraordinary structural integrity that rivals that of steel, and it continues to be used in modern China as scaffolding for high-rise buildings. Here in this garden, it is layered and lashed to create an arcing series of canopies, each of which gives the impression of tracking a narrative, so that several stories appear to converge, collude, and diverge. From the overhead spans and cantilevers, bamboo cages are suspended; some hold lanterns and others hold folded paper birds. Throughout the Expo site, a theme song is looped through hidden speakers; the cardboard canaries could be interpreted as the singing birds for this tune, but also allegorical bellwethers for the environmental health of the site that was—up until recently—a sand mine.



The Garden of the Forking Paths – Karl Kullmann (U.C. Berkeley)

The Garden of Forking Paths is set on a gentle spur that runs down into the adjacent lake. At the site's highest point, a break in the bamboo frame creates a single opening through which you enter the garden. Once through the threshold of the frame, visitors are presented with a moment of decision; the path splits repeatedly so that one path becomes two, then four, and so on, as it fans out over the convex landform. To the side of each path, rebated stainless steel runnels carry gravity fed water that fork alongside each path bifurcation. Ahead, the view is obscured in part by the canopies of small trees that cloud the relative value of each path choice that the visitor must repeatedly make. Deeper into the garden, increasingly extreme topographical variance causes paths to split vertically; at this point some water channels also disconnect from their host paths, holding a gentle grade as the paths become ramps and descend with the fractalized topography. In all, thirty paths and runnels reach the edge of the lake; some slide seamlessly into the water while others require stairs to manage the level transition. At the most radical level change to the left of the site, a retaining wall holds back the earth and embeds several flights of steps; here a bonsai tree sits precariously on elevated but inaccessible plane that convenes with eye level as the visitor descends the adjacent steps.

In the garden, the forking channels reverse the natural viscous tendency of water to converge, where individual trickles combine to form a stream, and then a creek, a brook, a river, and so on. This dendritic hydrological pattern is also reflected in the construction of the grand narratives of history whereby a rational procession of events can be viewed as the downhill convergence of stories from individual sources toward a single dominant account. By inverting this with a system of bifurcating flows of water and people, the garden can be read as an allegory for a world view of multiplicity rather than singularity, furnished with parallel worlds or stories rather than reductive meta-histories.

University of California, Berkeley

All photographs remain copyright of the author and may not be reproduced in any form without the author's prior consent

Notes

With gratitude to Dean Qingyun Ma and Professor Paul Tang, who organized university involvement through the University of Southern California American Academy in China. Thank you also to Professor Linda Jewell for her advocacy, and to U.C. Berkeley MLA graduate students Eustacia Brossart and Amber Nelson who contributed to initial concept design. The Garden of the Forking Paths was supported by generous funding from the USCAAC, as well as a Faculty Research Grant administered by the Committee on Research at U.C. Berkeley.

Except for the author's own design, the garden descriptions contained in this article are from the author's own experiential interpretations and are not necessarily representative of the designers' conceptual intent.