TEN TRENDS IN THE CONTINUING RENAISSANCE OF URBAN WATERFRONTS

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ABSTRACT


The roots of the blossoming of waterfront parks and amenities in postwar North America and Europe are traced from the Renaissance onward. Ten current trends are identified: large-scale mixed-use development; open edge and access improvement; lessening of highway encroachment; small stream and canal bankside development; historic restoration and imitation; blossoming of the people-place/marketplace; world exposition development on the waterfront; integration of environmental art and lighting; the growth of festivals and other ephemeral events; and the increase in the regulation of waterfront site development characteristics.

INTRODUCTION

Waterfront revitalization has grown and blossomed considerably in the past 40 years. In the immediate postwar years there were the beginnings of the reopening of windows and doors on the central urban waterfronts with their transitions away from the inefficiencies and clutter of 19th and early 20th century industrial and commercial patterns. There, as well as elsewhere, in city or town large or small, the desire for peaceful and soul-restoring gardens to permit escape from the memories of recent war or the pressures of emerging post-
industrial society created a great number of attractive and genteel waterfront parks, plazas and embankments on several continents, good oases which were intended to serve individuals, primarily, in their pursuit of relaxation, diversion and casual social interaction (Figs. 1 and 2).

More recently, since the beginning of the 1970s, different social impulses and public policies have been at work, responding to expressed or assumed desires of people for livelier and more participatory activity in public places, in particular those places as the urban waterfront which possess the aesthetic framework and charisma that make for good entertainment and good social interaction. In this more liberal context, the market-place has found an important role, in some instances a leadership position, that has shaped waterfronts inventively and, in some cities, with a thoroughness that has transformed them into the new dynamic urban centers which are gradually ascending in importance relative to other key nodes of their cities.

At the same time as some waterfronts have enjoyed a marriage with the market-place, others have sustained and broadened the romance with nature and art, creating new environmental forms, preserving niches of significant natural environment, and introducing cultural form and activity into park settings which address the individual as well as the group.

There are many ancient roots to the public waterfront. Egypt, Phoenicia, Greece and Rome, as well as the early civilizations of Asia and Europe, created inventive forms on or near the waterfront of commercial, ceremonial or aesthetic value. But it was only with the arrival of the Renaissance that a continuum of progress was established in the perception of rivers

Fig. 1. Charles River Basin, Harvard Square to right of photo.
as open space corridors and in the search for design solutions that would bring beauty and usefulness to cities on the river's edge.

Where the Middle Ages walled cities in for defense against invasion and control over commerce, the Renaissance introduced the concept of open space on the water's edge, at first in the form of a campo or market square as in Venice and elsewhere, and somewhat later in the form of continuous promenades, as in the Cours La Reine, the first promenade on the River Seine. This is laid out on a tangent along the river as it bends to the west leading from the Tuileries, which themselves had been slightly turned away from the central axis of the Louvre toward the Seine. This gradual accommodation to the riverside, directed by Marie and Catherine de Medici in separate efforts in the 17th century, must be credited as the beginning of the riverfront park and promenade in France.

There are, of course, many other early instances in Europe and the Americas of public common rights of access and special amenity areas set aside for the citizen and visitor at the central waterfront of a city.

There have been many other important contributions and milestones in the development of the modern waterfront park and plaza. The development of canals in the early years of the industrial revolution, an event which introduced access for pleasure as an incidental use along with the primary transportation and other uses of the era, was a significant contribution to the democratization of the water's edge at the time and became even more important in the development of recreational and aesthetic values on the waterfront as the rail-
road superseded the canal as the main artery of commerce and as the public's appetite for boating and historic preservation combined to force government to prioritize canals for recreation and restoration in our own time.

The Beaux Arts influence, known also as the City Beautiful movement in the U.S.A., exercised a strong effect over waterfront development in almost every part of the world. Magnificent parks, with broad vistas along major and secondary axes focused on Renaissance-inspired buildings and monuments and on the heart of the landscape itself, were laid out on prominent river, lake and bay shores. The affinity of Beaux Arts for the water's edge was nurtured by the Paris international expositions and the development of monumental architecture along the Seine, where the reflections of structures and trees during the day and of lights after nightfall underscored the marvel of those relationships of structure, space and surface-enrichment that Beaux Arts was all about.

Finally, from the early years, two other major influences stand out. One is the evolution of the common field and footpath and the public park; the other is the development of an understanding of the natural sciences and the endangerment of both man and the other species of this planet by society's unwise management of the environment.

All these early influences—the Renaissance securing of openness and order, the promenade, the canal towpath and lock-stations, the evolution of the commons and common footpath, the Beaux Arts movement and its City Beautiful spin-off, and the emerging appreciation of the ecological and aesthetic importance of stream preservation—combined to give us the waterfront parks and public embankments of the latter years of the 19th and the early part of this century.

They were on the whole passive parks, places of respect for tranquillity, and the freeing of the world from the grip of war reinforced, as stated earlier, the gentility of the public waterfront. Places of peace and reflection were needed urgently in that period of transition after the war to the beginnings of the post-industrial evolution.

But what of the more recent years, from the 1960s onward, which were summarized earlier as being characterized by more intensive public interaction, the seeking of charisma and entertainment, the emergence of the market-place as a central player, and the saving of natural environment within the urban fabric? What understanding do we have of these waterfronts, what role do they play in the long history of the public riverside, and what do they point out to the future?

There are at least 10 major physical trends on the US riverfront which are influencing its overall direction.

**MIXED USE**

The first of the trends, in terms of overall impact, is the trend toward large-scale mixed use or dual-use development. There are examples of this format on every inhabited continent today, but Harbourfront in Toronto is a good example of a large and difficult central harbor site growing increasingly successful with the passage of time (Fig. 3). One of the keys to its success is the way in which dining, entertainment, boating and sailing, artists' and artisans' studios and workshops, and all the other central and incidental uses that make up a "people-place" were made to work at the heart of the property even before much else of the residential and office development came along. The success of the amenity areas, in other words, provided the public with the assurance that Harbourfront is a live neighborhood and no longer an abandoned port and warehouse area. Fine entertainment and dining are available there, municipal services, including security, round out a convincing image. If large-
Fig. 3. Harbourfront, Toronto.

Fig. 4. North Park, B.C. Place, Vancouver (model) (photo: British Columbia Place Ltd.).
scale developments on the waterfront are to succeed, a diversity of uses and an integration of vibrant and dynamic social activity must be woven into the development plan.

The same holds true for Vancouver's B.C. Place, a 224 acre mixed-use development site (Fig. 4), 65% of which was used for EXPO 86, which plans to spend $205 million in public financing to establish infrastructure, parks and marina expansion, and hopes to attract several times that amount of money in private leases and development over the next 25 years and beyond. Here, too, the mix of usage has been made diverse, with affordable housing, offices, retail space, hotels and commercial recreation. But the special diversity of B.C. Place is in its planned cultural uses, many of which have already been built as part of EXPO: an arts, sciences, and technology center; a forestry center; a children's world; water activities such as canoeing and paddling on a fixed-surface lake; and a 10,000-seat theater with 3000 seats under cover. All of this is to be called the B.C. Place Park and is defined by the B.C. Place Corporation as a "gathering place" for all British Columbians. It will be connected to a continuous 4200 m seawalk, linked to the development's new multi-use stadium, and integrated with the park and open-space network as a whole, which constitutes a remarkable 37% of the entire project site. The steps the development board have taken to phase-in future projects as conditions merit would also tend to conserve the beneficial effect, it would seem, of B.C. Park Place on those projects as they emerge.

Another example is Battery Park City, on Manhattan Island, adjacent to the World Trade Center (Fig. 5). Although there is a mix of uses
Fig. 6. Covington Riverfront Park Concept Plan (Roy Mann Associates, Inc.).

Fig. 7. Circular stairs, Rideau Canal.
here, there is very little on the ground other than a wholly tranquil public esplanade. Twenty years ago, when new shore development for lower Manhattan was being conceived, more dynamic openings onto the water and higher crowd energy were contemplated.

DEMAND FOR OPEN EDGES

A second trend is a continuing strong demand by people for an open and accessible river edge. Public access and accommodation on the riverfront have their roots in traditions established centuries ago, as has been pointed out. We might also remind ourselves that people the world over have always sought the river for diversion and rejuvenation, certainly long before Canaletto and Seurat recorded the evidence for us, probably ever since our prehistoric forebears learned to work hard but discovered as well that rest and diversion were welcome and sometimes sacred counterpoints.

In Covington, KY, and Hartford, CT, both on rivers with hazardous flood regimes, special steps have been taken to permit public access on foot and dining and other amenities on the waterfront (Fig. 6). In Covington’s case, the author conceived a special floodgate for retrofitting into the existing 26' high floodwall, to be shut automatically by a hydraulic system in advance of an approaching rise in river level. On the river itself, there is a system of floating docks attached to vertical spuds and accessed from shore over hinged walkways. In Hartford, a broad program for improving access over levees, or dikes, on both sides of the Connecticut River has now been partly completed.

In Ottawa, Canada’s capital city, reinforced concrete steps thinner than standard were specially engineered to give these circular stairs
finer aesthetics for those on the Rideau Canal (Figs. 7 and 8). The canal’s café edge, in the other view, demonstrates the careful attention paid by the designer to ensuring both ample access and crowd intimacy—a happy combination that could not have been provided by either a broader or narrower canalside.

TAMING THE HIGHWAY

A third trend has been the fading away of the highway encroachment threat, at least for the moment and, as a consequence, improved roadside access to the river. London Bridge in 1616 (Fig. 9) lacked the roadway capacity needed by the burgeoning traffic of its growing city in later years, and so, in time, the apartments and shops and other urban uses that crowned it in Visscher’s drawing were totally demolished, as was the bridge itself to make way for a more suitable successor. As urban bridges became modernized over the years for improved vehicular movement, so too were their undersides improved to allow vehicular and foot movement cross-wise along river edges, where the importance of public access grew in proportion to their economic value.

In many instances, however, the dominance of railroad and highway considerations squeezed foot access out of the picture, and new barriers to pedestrian access were created. Even in recent years, waterfront transportation projects have been worked in without providing paths along the river for those who had reason for travelling on foot, or perhaps no reason at all. And so in Paris, along the Seine’s right bank, an autoroute displaced the old landings and their strollers and artists and lovers, with-
out a good substitute (Fig. 10). Madrid, too, has built its roads along the Manzanares without leaving much of an edge for path routes or other amenity use. In Paris, the Canal St. Martin was almost paved over 18 years ago, but was saved as the result of vigorous citizen and professional protest. The Seine’s Rive Gauche, untouched by the expressway program, still carries some of the traditional pedestrian character we have long associated with this beautiful river.

One good lesson on how to accommodate both transportation and the pedestrian, although this cannot be done everywhere, comes from the Hudson shoreline of Manhattan, where the landscape architect Frederick Law Olmsted designed a magnificent promenade and other beginnings of Riverside Park on top of a deck constructed over the New York Central Railroad tracks for over a mile. Later, in the 1930s, Robert Moses completed the park from the deck to the shore, leaving sufficient space for a new roadway as well, the Henry Hudson Parkway. In Franconia Notch, in northern New Hampshire, RMA contributed to the design for a new interstate highway segment (I-93) 400 ft further up the mountainside than initially planned to save a small stream for inclusion in a state park visitors center. In the end, this alternative turned out to be less expensive as well, because of the more favorable cut-and-fill conditions further up the slope.

There is, overall, an improved climate of understanding in the U.S.A. today between the highway engineer, the landscape architect and the environmentalist. If this can continue, more improvement may be expected along presently-inaccessible riversides.

**BANKSIDES**

A fourth trend is in the development of the banksides of canals, creeks and other small streams—waterways that until recently have
been largely left aside in favor of main riverfront enhancement (Fig. 11). Much of the present appreciation of the value of these small waterways is due to the success of the San Antonio River Paseo del Rio, in San Antonio, TX. The development of cafés and restaurants along beautifully designed paths close to river level lies one level below the crossing streets and offers visitors a chance to enter a separate world with just a little magic. The paths along the Chesapeake and Ohio Canal, originating in Georgetown (part of Washington, DC), now have more shops and eating places, but generally the land is a more austerely used asset, since its status as a historic resource limits commercial changes along its length. The Rideau Canal (Fig. 12) has a historic series of locks and passes both Canada’s Parliament and other richly historic urban structures, but other canals in other parts of North America sometimes tinker with history and introduce embellishments for the sake of improving the flavor. There is nothing wrong with that; creating beauty or cultural interest where little existed before can only add value to our river and canal resources.

The same is true of the Indiana Central Canal in Indianapolis and of Waller Creek in Austin, TX. The Indiana Central Canal is being re-excavated, lowered from its present level which is just a few feet below street grade, to an elevation of 12 ft below that, to make possible travel by foot, barge and bicycle over the length of about half a mile in downtown Indianapolis. The author proposed the concept in 1981; Browning Day Mullins Dierdorf, Inc. have designed the system. Waller Creek is a wholly different kind of waterway—a small, perennially low-flow stream in downtown Austin which receives high flood flows during storm, typical of
the southwest U.S.A. But the potential exists here, too, to create a grade-separated creek and creek-level paths and cafes and shops, with a constant-level water pool in the creek and boats moving up and down for a third of a mile. A flood bypass program, which has already been recommended by the city's engineering consultants, would make such revitalization feasible.

**HISTORIC RESTORATION**

A fifth trend is historic restoration and imitation in the creation of river corridor ambience. The buildings at Long Wharf in Boston are almost 200 years old, and the new sleep-and-play village of Port Grimaud in France is 20 years old (Figs. 13 and 14). Yet both serve a common purpose: to secure for people the
Fig. 13. Long Wharf, Boston.

Fig. 14. Port Grimaud, Provence.
privilege and pleasure of experiencing the enduring qualities of the historic waterfront. In Darien, GA, RMA's plan was to create an entire replication of an early 19th-century waterfront which had been almost entirely destroyed during the Civil War. The purpose was to create a tourist attraction which would be true of typical waterfront harbor and industrial activity of that earlier age, something which has proven to be of great interest to the US public. In Portsmouth, VA—another waterfront where almost all early buildings had been lost—our recommendation was to build contemporary structures with traditional forms and materials and to build a berth for old ferries and other historic work boats.
A sixth trend is the blossoming (although some say over-ripening) of the people-place/market-place. Baltimore’s Harborplace is one of the most successful of such places and, in its combination of crowd-generating ability and serenity of pose, resembles the opening of the Piazetta onto its quay in Venice (Figs. 15, 16). The fear among some market-place watchers is that the specific formula of Harborplace will be repeated endlessly, to the point where its uniqueness will be lost—a sort of McDonaldization of the waterfront.

WORLD EXPOSITIONS

Perhaps what is happening at some of the recent world expositions, which one might identify as the seventh trend, may offer new creative
Fig. 17. FXP 86. Vancouver (photo: British Columbia Place Ltd.).

Fig. 18. Louisiana World Exposition, New Orleans.
recipes for successful market-places on even modest waterfronts. We remember our discussion of B.C. Place, at the EXPO 86 site in Vancouver, and its planned people-oriented B.C. Place Park (Figs. 17 and 18). The Louisiana World Exposition, in 1985 in New Orleans, had generous amounts and varieties of crowd-pleasers, but lost money disastrously. Did this have something to do with the layout, or the scattered nature of these elements? Or are the two unrelated? The site was cramped between permanent port facilities. Perhaps this pinched the setting’s image.

The Indiana White River Park is not an exposition ground, but a combination waterfront that appears to be imitating one. A theme park, a zoo, a botanical pavilion, a performance center and a monumental tower are all part of this Indianapolis plan, to which RMA contributed, which was estimated to cost $182 million in 1981. Unlike the market-place/people-place waterfront, this project relies on major magnets, and may fall short on the cafés, shops, and riverside/canalside attractions that draw the general visitor.

The Universal Exposition to celebrate the 500th anniversary of the discovery of America – EXPO 92 – will radically change the corridor of the Guadalquivir River of Seville. Yet the plan by Emilio Ambasz and Associates (Fig. 19) has ingeniously called for the setting of pavilions on barges, anchored in three lagoons, to be carved into Cartuja Island, with access to them by ferry boats modeled after the vaparetto of Venice. In this manner, a vast park would be left to Seville after the exposition closes,
Fig. 20. The Milk Bottle, Boston.

Fig. 21. Athena Tacha's Blair Fountain, Tulsa (photo: Tulsa Parks Authority).
Fig. 22. Detroit waterfront (photo: Detroit Parks and Recreation Department).

Fig. 23. Lighting scheme concept by Roy Mann for SummerStArt.
without an expensive road infrastructure built in the process.

ENVIRONMENTAL ART

Trend number eight is a greater integration of environmental art, defined broadly, and environmental lighting into the riverfront. Sculptural elements naturally fall into this category - sculptured architecture, such as the Jefferson Memorial on Washington’s Tidal Basin, and the Basin itself a fine work of environmental art, are both early examples. Sculpture and ornament, whether traditional or ground-breaking, are also part of the broad fabric of environmental art on the waterfront (Fig. 20). This Borden-designed milk bottle at Museum Wharf in Boston, which Robert Venturi would refer to as a “duck”, has become the main logo of the wharf. Then, too, more use and increasingly skillful use of routine embellishments such as café table umbrellas and well-turned paving patterns have also contributed. The handsome stairs on the San Antonio River are another example of environmental design helping collectively to create an extraordinary milieu. The Blair Fountain, designed for the Tulsa River Parks Authority by Athena Tacha on the Arkansas River, is one of a growing number of sculptural embellishments that are brilliantly lit at night (Figs. 21 and 22). This view of the Detroit river will remind us that it is the total fabric of lighting, permanent and ephemeral, which defines the magic of the river by night.

The montaged image of a lighting concept for Fort Point Channel in Boston (Fig. 23), Christo’s “Wrapped Pont-Neuf”, and other expressions of environmental art are contributing to new public awareness of the aesthetics
of riverscape forms. The new awareness is, in turn, fostering a stronger interest in, and perhaps a greater public support for, the use of riverfronts for art and entertainment and the design of edge space to accommodate them.

**FESTIVALS/EPHEMERAL ART**

A ninth trend is the growing accommodation of festivals and other ephemeral art, including concerts, which are a strong ingredient of the art totality of the riverfront. Brother Blue, marvellous street soul poet of Boston, helped to weave the story of the summer solstice as a great meeting ground at which spring passes into summer, sky meets earth, land meets the waters, and art and song fill the river valley – in this instance the corridor of Fort Point Channel in Boston. This was the theme of SummerStArt, a festival which the author developed for the Boston waterfront in 1982; the Paul Winter Consort provided the musical side of this fable (Fig. 24). Great braces of lighter-than-air sculpture, searchlights and other lighting filled the air above. The illustration should point out the important role that night illumination has within the broad definition of environmental art, as well as the larger roles festivals are playing in enlivening the urban waterfront.

**WATERFRONT REGULATION**

The final trend is an increase in the enactment of local regulations governing building height, setback, and other characteristics within the urban river corridor. The great furor at the end of the 1960s over the erection of a bulky high-rise tower on Boulevard Montparnasse in the immediate background of the Eiffel Tower as seen from the Seine corridor of public monuments was a watershed in our understanding of how modern construction can affect aesthetic value of edge views and river corridor panoramas. One rallying point of this protest was the magazine l'Architecture d'Aujourd'hui, which published a special issue on Paris in the summer of 1968. In that issue, I reported my evaluation of the interrelationships between the open landscape of the urban edge of its monumental buildings, and the skyline ridge of present and potential future high structures. I conjectured that zones could be established with either moderately- or highly-restrictive height controls that would protect certain arcs of view as seen from the river’s edge. The prefecture of Paris did take action some time later to restrict building heights in the background vicinity of the monuments – action which has also been taken in many other cities in Europe.

In the U.S.A. it has been more difficult to keep high-rise structures out of background views, perhaps because there is a thinner historical fabric to begin with, but there have been a few steps taken in this area. The city of Austin has adopted a formula for calculating permitted building heights within view corridors radiating out from the Texas state capitol building prepared by Austin’s planning department and enacted into the city’s code three years ago. Among other examples within our own work are a number of guideline reports for federal and state agencies, including “Shoreline Appearance and Design: A Planning Handbook”, which suggested site planning and building appearance standards for communities along the Long Island Sound shoreline (the states of Connecticut and New York) which were prepared by RMA for the National Park Service and New England River Basins Commission in 1975.

Some of the physical planner’s work, like the handbook for Long Island Sound, is used advisory in the U.S.A., unlike Europe where planning committees have more direct regulatory powers. But in many cases, now more common, physical planning is translated into local ordinance. The Town Lake Corridor Study, conducted in 1985 on the Colorado River in Austin, an eight-mile stretch in the city’s downtown, examined the resources, po-
tential actions and recommended actions of and for that corridor, which was beset with insensitively sited large-scale structures during the past few years. In our consultations to the Town Lake Task Force, we conceptualized a corridor framework defining 18 subdistricts within the Town Lake corridor, each of which we found to have natural and urban topographical characteristics suggesting one or another degree of building height and setback controls. On the basis of this analysis, we drafted an ordinance for consideration by Austin's city council which would control height, setback, edge quality and access for new construction and would encourage river/park-related dining and retail uses on ground floors. In April 1986, the ordinance was enacted by the city council and will, we hope, shape a corridor envelope over time that will be effective in optimizing views of the river, opening riverside access, and encouraging an exciting urban edge along the river's parkland edge. The ordinance, known as the Town Lake Overlay Combining District, is one of the few or perhaps the only such ordinance in the U.S.A., as far as we know, which restricts building height and setback according to river corridor landscape characteristics.

There are other trends that one might mention: the generally improved concern with ecological protection and the protection of unique elements of the environment as valued niches within the urban river corridor, the growth of boating and other river leisure activity, and so on, but these deserve full reviews on their own.

CONCLUSIONS

What might we conclude, therefore, with respect to our understanding of where the river corridor presently stands and where it might be headed as we turn the corner into the 21st century? Well, each of the trends we have looked at is a solid pattern and will probably continue and even strengthen. In fact, as cities realize how good their riverfront revitalization projects have become, or might become if they are looking over the shoulders of the communities which are doing the really super work, even more creative energy and funding will be assigned to our riversides. For example, some cities may use improved construction technologies to provide greater sheltering of waterfront open space, with space heating and cooling under a transparent skin, so that people can extend their enjoyment of the riverside into longer days and seasons. There may be more extensive use of new lighting technologies, for both artistic and functional ends. The same is likely in the use of water for display and the incorporation of sculpture and other art forms. Some cities, particularly those of the north which are still digesting the inspiration they have found in the Latin countries and the Far East, will introduce floral displays of great beauty and originality. All, it would seem, would be likely to accommodate and amplify the festivals and the celebrations that have established their place so well in recent years.

Greater interdisciplinary collaboration will be the norm, with engineers dealing with flood control and riverside highway construction increasingly seeking out landscape architects and architects and other environmental specialists at the very outset of a project. Collaboration can often lead to the greatest possible overall quality and broadest possible public benefit in projects of even limited objectives. The other disciplines will also seek new ways to make creative ideas a reality and that cannot be done without all taking part with full creative participation – the same kind of participation that invented those beautiful circular stairs on Ottawa's Rideau Canal.

We might note the potential danger, too, of future destructive trends. Wildlife habitat and other important ecological areas may fare even worse than they have in the past unless deliberate steps are taken to preserve natural precincts of special significance. New large-scale development, including transportation infrastructure, may repossess the waterfront without
leaving adequate access and amenity space.

But, on the whole, we are making progress. We are witnessing a renaissance of the urban river, but we are still at the beginning of this renaissance and the best years are yet to come.