

Remaking the Urban Waterfront
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Chapter Two: The Unique Characteristics of Urban Waterfront Development

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It was known for centuries as “Genoa the Superb,” not simply for its leading role in the seafaring culture of the Mediterranean, but for an unforgettable silhouette as seen from the sea. Embracing its harbor in an amphitheater-like form, the city of Genoa appears carved from the coastal mountains, the mountains themselves rising straight from the sea. To visit Genoa is to immediately feel the power of place made possible by inhabiting a portion of the earth at water’s edge.

While Genoa is blessed with a particularly memorable geography, it is hardly alone among cities world-wide whose waterfronts provide indelible images of place, and periodically in those cities’ histories become catalysts for dramatic urban change and renewal.

Urban waterfronts are unrivaled in their potential for providing for an exceptional or celebratory enterprise. Imagine the Sydney Opera House, or the Guggenheim Museum in Bilbao, or even Cleveland’s Rock-and-Roll Hall of Fame, *not* juxtaposed against each city’s body of water? The London Eye, London’s majestic Ferris wheel, actually sits in the Thames. Much of contemporary Chicago’s identity and self-image, not to mention wealth, comes from its spectacular 20-mile long facade stretching along Lake Michigan. Where else but along their portion of the mighty Mississippi would the citizens of St. Louis construct their monumental Gateway-to-the-West? Humanity, it seems, delights in and finds inspiration at waterfront settings, but increasingly asks more of them than mere spectacle.

As Americans seek to recover the virtues inherent to city living, recalling urban pleasures and returning to places semi-abandoned during a century of suburbanization and industrial obsolescence, urban waterfronts lure us more than ever, and for a broader array of reasons. Along them it seems possible to accommodate the changing needs of today’s urban dweller, as modern societies continue their millennial shift from industrial-based economies (and their spatial demands) to service and lifestyle-based economies and their requirements.

To take advantage of the opportunities afforded at water’s urban edge, and to succeed in new development there, the following issues must be considered.

1. Transformations along urban waterfronts are a recurring condition in the evolution of cities, and tend to take place when there are major economic or cultural shifts leading to conflicting visions about the course of contemporary urbanity.
2. The aura of a city resides and endures along its waterfront allowing substantial changes to occur *without* inevitably harming its enduring qualities of place.
3. Despite undergoing periodic and at times quite rapid change, a waterfront maintains for its bordering city some inherent and unalterable stability.
4. As valuable *and* often-contested realms, urban waterfronts bring forth the opposing though reconcilable human instinct to preserve and to reinvent.
5. Even though a city’s waterfront serves as a natural boundary between land and water, it must *not* be conceptualized or planned as a thin line.

6. Waterfront redevelopments are long-term endeavors with the potential to produce long-term value. Endangering this for short-term riches rarely produces the most desirable results.
7. To make underused or obsolete urban waterfronts come alive (after industry has receded) they must become desirable places to live not just to visit and recreate.
8. The public increasingly desires and expects access to the water. This usually requires overcoming historic barriers -- physical, proprietary and psychological -- while persuading new investors that there is merit in maintaining that valuable edge within the public domain.
9. The success and appeal of landside development is intrinsically tied to the success and appeal of adjacent water uses -- and, of course, to the environmental quality of both the water and the shore.
10. Distinctive physical environments (characteristic of waterfront setting) can serve as an antidote to the homogenizing tendencies of modern development, providing a competitive advantage for a city in relationship to its region or rival cities.

The body of this chapter examines how several American cities have and are continuing to respond to the challenge of their waterfronts in relationship to the considerations outlined above.

1. The transformation of urban waterfront is a recurring act in the life of a city.

Consider the case of contemporary Boston. Its history demonstrates two important lessons regarding waterfront development: 1) the replanning of a waterfront is a recurring need, and 2) undue caution is rarely the proper course of action. As it has throughout its 370-year history, the City of Boston is in the midst of re-designing one of its waterfronts. The newly renamed South Boston Seaport District, an area exceeding 700 acres (320 hectares) in size and lying directly east of the downtown, is poised to receive the next expansion of the downtown. Amidst a robust economy and following substantial public investment in regional access, including a new harbor tunnel which brings the airport to the district's doorstep, the Seaport District is brimming with anticipations, plans and potential investors along with ample worries and political intrigue.

The area encompassing the Seaport District was created a century ago through a massive land-fill. The goal was the creation of a modern boat-to-rail port to replace the historic but by then obsolete piers of central Boston, no longer able to accommodate the scale of modern ships and lacking sufficient rail connections. However, with the decline of local maritime industries which commenced gradually following World War I, the area has been underused, maintaining some maritime and industrial functions, but also hosting large parking fields and similar supporting uses for the nearby downtown. The area has for years essentially served as a land bank, awaiting better regional access and, more importantly, demand for the expansion of the adjacent downtown.

Seemingly overnight, the area is metamorphosizing into convention venues, hotels, luxury housing, parks and a cultural amenity-or-two. But some wonder, if there will still be room for the traditional fishing fleet once such a fabulous array of modern uses are realized -- upwards of 20 million square feet (2 million square meters) are in various stages of planning or design. And the concern is not just about the survival of the fishing fleet, itself diminished with the depletion of nearby fishing banks. The concerns extend to overbuilding, traffic congestion, gentrification vs. affordability (particularly of the housing being proposed), and the long-term affects on the adjacent

South Boston community, long a cohesive working-class neighborhood largely Irish-American and generally intolerant of outsider influence. Maintaining industrial jobs for the residents of South Boston is another concern. Further worries include whether sufficient public space will be provided; whether the right balance of uses is being planned; whether the public can adequately guide the actions of large and powerful landowners; whether too much history will be erased; and who stands to gain or lose local political influence.

Similar concerns have occurred during prior periods of Boston's waterfront development history. Few of the world's cities (with the possible exception of contemporary Hong Kong), have witnessed as substantial a change to their natural geographies as has Boston. As one walks around central Boston it is nearly impossible to visualize that the original Shawmut Peninsula was virtually an island, or that four out of five acres is artificial land. To prosper the city had no choice but to make land, amidst a geography of steep hills, tidal flats, marshes and a landmass too meager to support any sizable settlement. From the middle of the eighteenth century on an expanding seafaring economy led the young city to push outward unto its harbors and bays to gain useable land.

The process began in two ways: by "wharfing out" -- filling the slips of water between wharves -- and by dumping earth into the harbor from the scraping of the steepest hills in the effort to make them easier to settle. These efforts foreshadowed the much larger nineteenth-century land-making ventures that created the topography of contemporary Boston. In all, some 3,500 acres (1,600 hectares) of land have been created, including much of the land on which Logan Airport is built, through more than a dozen major land-fill initiatives spanning a 200-year period.

Among the remarkable waterfront environments that this land-making history produced are the Quincy Markets, an 'urban renewal' project not of the 1970's when it was re-imagined by James Rouse as the first 'festival market place,' but of the 1820's when an earlier town dock was filled to create the original market buildings. The Back Bay venture involving the filling of 600 acres (250 hectares) of the back bay of the Charles River preoccupied Bostonians for nearly 40 years between the late 1850's and 1890's. It produced one of the nation's most distinctive residential districts and was further augmented during the 1930's by the completion of the Charles River Esplanade. Indeed, the Charles was eventually graced with a continuous 18-mile long public domain occupying both its Boston and Cambridge banks. Frederick Law Olmsted's late nineteenth century work on Boston's park system produced Day Boulevard, Pleasure Bay, and Marine Park, a continuous recreational open space along the southern and eastern edges of the South Boston Peninsula. Beginning in the 1960's Boston's oldest wharves including Long Wharf, Central Wharf, Lewis Wharf, and a number of others in the North End experienced adaptive re-use and/or reconstruction to achieve one of America's earliest transformations of old and obsolete wharf architecture into a modern waterfront residential area.

It is this impressive record during prior eras of waterfront renewal -- generally eschewing conventional wisdom while producing striking and distinct environments -- that should prepare Boston well for doing so again at the Seaport District, despite present worries. However, at the present a sentiment of impending loss pervades, as if the future about to unfold will prove less desirable than present circumstances. And this uneasiness constrains vision. During past efforts, however, conflicting interests and competing visions were eventually reconciled on behalf of larger public purposes such as expanding the landmass or accommodating new uses on tired waterfronts. Maintaining a status-quo was not a high priority, nor should it often be at moments of impending economic change.

2. The waterfront is where the aura of the city resides

There is an enduring quality to a city's waterfront as it bears witness -- and often takes the brunt -- of the ebbs and flows of a city's prosperity. Seizing upon this aura during a period of change is key to successful waterfront planning.

Take Pittsburgh and its three rivers. Until recently, as in many cities thriving during the industrial age, the main role of Pittsburgh's rivers was to facilitate the city's industrial might. Rivers of Steel they were called. For miles their banks were places of production, and of transportation infrastructure in support of that production. At the height of the steel production era, few even recalled that the initial reason for the city's siting was territorial control at that strategically important confluence of the Monongahela, Allegheny and Ohio Rivers, not for processing raw materials. In terms of economic wellbeing the rivers were *essential*, but essential in the way that a production-yard is essential. In terms of living, recreating, celebrating, governing, socializing, touring, locating cultural institutions, entertaining visitors, communing with nature -- those varied urban functions that are found on waterfronts today -- the Pittsburgh rivers were of secondary use. Such activities took place elsewhere, often as far from the industrial banks as possible, or far above on the hilltops where the soot was less pervasive, or at least downwind of the stacks.

Pittsburgh today (and, again, it is hardly alone) is in the process of figuring out how to turn itself inside out. For the next successful iteration of Pittsburgh its production "back yard" must become its front yard. *A Riverlife Taskforce*, consisting of the leaders of the corporate, cultural, philanthropic, real estate and political communities, is charged with the task, and it is not an easy one. It is difficult physically, emotionally, and fiscally, especially since the metropolitan area is not in an era of substantial growth. Yet, it is clear that for the city to thrive again, a metamorphosis along its rivers must continue, indeed, accelerate. Those who will be attracted to the city in the future, or who will choose to remain, will do so not because steel mills and rail yards once dotted the riverfronts, but because the riverfronts will be accessible, green, beautiful and clean; offer great places to live; support the life-style expectations of the purveyors of the digital age; and, yes, preserve important moments of Pittsburgh's history, minus the unhealthy air and industrial din.

Constrained as they have been by two centuries of intensive if no longer entirely vital uses, the three rivers of Pittsburgh are proving to be the best catalysts, still, for the city becoming new, again. In the past several years more than a billion dollars has been invested in the proximity of the six river banks. Both a new baseball park and football stadium have opened, along with several riverfront parks. Nearby along the Allegheny, an architecturally impressive headquarters for the Aalcoa Corporation has been built. Across the Allegheny a new convention center has risen, a landmark architecturally and in terms of its "green" engineering. The Carnegie Science Center is in the midst of a sizeable expansion, being designed by Jean Nouval. The Mon Wharf Expressway is being partially reconstructed in a way that will enable public access to the Monongahela to which the highway has been a barrier since its original construction.

These large projects are complemented by more modest -- though hardly less important improvements such as a riverbank trail system. While seeking broad economic investment, Mayor Tom Murphy (an avid runner and cyclist) doggedly advocates extending the riverfront trail and water access system, mile-by-mile, to eventually form a continuous public way along the full urban segments of the three rivers and even beyond. A change in local attitudes towards the rivers is well underway. Pride no longer rests with their faded glory as those *Rivers of Steel*, but as enhancers of daily experience living or working in the city. In geography the great confluence of the three rivers is there still, now being surrounded by emblems of today's idea of the good urban life; great places to live and to assemble, to partake of nature, and to encounter culture.

Redesigning the character of the rivers and the roles which they serve is enabling the city to recapture the magic, magnetism, exoticism even, which all great cities must have as they compete with their sprawling peripheries and a world economy. The Riverlife Taskforce is aptly named, for it recognizes the new life-giving characteristics of the city's oldest asset.

Now consider Shanghai, a city at a very different point in its evolution. While Rome was not built in a day it appears that Shanghai is determined to prove that it can be done. In a little over a century Shanghai has grown from a fishing community to a megalopolis expected soon to reach 20-million people. The full ferocity of this barely imaginable rate of growth is being borne today.

While Americans worry about sprawl and disinvestment from its core cities, in Shanghai Manhattan and Los Angeles seem to be emerging concurrently. Incredibly, Shanghai is committed to constructing 1,800 miles (3,000 kilometers) of elevated highways in the metropolitan area over the next decade. With pride in their 2,400 buildings (and counting) that exceed twenty stories in height, and without expressed sentimentality for the 'good old days,' so common today in the West, Shanghai exudes an optimism about its future.

Amidst such confidence for absorbing massive change can the DNA of the fishing village survive, much less maintain relevance? Many in Shanghai answer affirmatively as they rally around a series of ambitious plans to re-orient modern, cosmopolitan Shanghai to its ancient river, the Huangpu, and to environmentally clean up its principal tributary, Suzhou Creek. While there will be many future highways, points out Zheng Shilling, vice president of Tongji University, there will only be one river. Precisely because everything in Shanghai (meaning 'upriver to the sea' in Chinese) is currently in flux, the re-commitment to its river is vital -- and culturally reassuring. After all, Professor Shilling asserts, "water reflects the morality and wisdom of our nationality." Such near mystical associations are not unique to Asian cultures and valuable for waterfront planning anywhere. Sure of their river as a stabilizing force and an enduring amenity, while welcoming modernization and growth, the planners in Shanghai are less concerned about precisely determining the most appropriate scale and uses along the riverbanks. In North American cities a general unease about impacts of growth leads to a belief that certain uses, commercial space perhaps or tall buildings will forever damage a proper relationship of city to harbor. In Shanghai such caution is at this moment secondary to the belief that the more of itself the city refocuses on the river the more faithful it will remain to its own heritage.

3. Despite undergoing periodic and sometimes rapid change, a waterfront maintains for its bordering city some inherent and unalterable stability.

When compared to present-day Shanghai, Boston and Pittsburgh seem stable and unchanging. Yet, imagine an expatriate returning to Boston following a 40-year absence -- not a particularly long period in the life of a city. He would have left a Boston at mid-20th century with its historic waterfront emptying (as it did in Pittsburgh a decade-or-two later) the port much reduced in size, maritime infrastructure abandoned, pollution and decay clearly evident. The not-so-busy wharves were storing a different kind of commodity: parked cars for the downtown, as stretches of river still do in Pittsburgh. Of course, the waterfronts of many industrial-era cities experienced a similar fate, and many have yet to recover.

Could our hypothetical Boston expatriate have predicted that within a generation the bustle at the waterfront would return, not in the form of warehouses, customhouses, longshoremen or clipper ships, but in residences, cultural institutions, tourists and pleasure craft? Boston's oldest waterfront is a center of action again, only in re-defined use and desires. Our expatriate would surely be surprised that Rowes, Burroughs, Lewis and Mercantile Wharves were now elegant residential addresses, not places of industry; that life in the Charlestown Navy Yard was being directed by a homeowner's associations instead of naval protocol; that 47 miles of shoreline were being steadily converted to a continuous public promenade; or that some of the most valuable local real estate was along wharves not-so-long-ago dilapidating.

Despite such surprises to his mid-20th century memories, this returnee would have little trouble finding his way along Boston's historic waterfront. Amidst all that was lost or transformed sufficient continuity persists. The particular geometries of piers and wharfs largely survive, as do many of the streets leading from them inland. The general shape of the outer and inner harbors is familiar, as is the disposition of the 33 harbor islands, and the silhouette of high grounds and hills as seen across water. Even with the extensive topographic change that Boston undertook, enough of the particular configuration of land, water and human artifice constructed at or near the edge

between land and water persists to immediately suggest in one's mind, yes, this is still Boston. Likewise, the infrequent traveler to Pittsburgh, New Orleans, Cairo along its Nile or London along the Thames will feel in familiar territory in the vicinity of the waterfront, regardless of architectural changes over the years. It is this capacity for geographic persistence despite periodic reconstruction of built form that is one of the most valuable qualities of urban waterfronts.

4. As valuable and often contested realms, urban waterfronts bring forth the opposing though reconcilable human instinct to preserve and to reinvent.

Cities that are exploring new uses for their waterfronts often have to balance grandiose expectations against the realities of local markets, traditions and resistance to change. A period of collective self-reflection often ensues before a plan can be made definitive and advanced.

Too what end should the waterfront or the economy be repositioned? Should planning for reuse support traditional maritime industries or promote new economies? Should the city seek new markets/status through a refurbished waterfront or maintain its long-standing identity? Should public investment favor residents' needs, attract newcomers or cater to tourists? Should it be used to shore-up adjoining neighborhoods or encourage gentrification? Should it increase public access or leverage private development at water's edge? Should traditional navigation channels be maintained, or be re-examined in favor of recreational boating? Should business expansion be favored or multiple civic and recreational needs addressed, especially those that private initiative does not readily provide? Should, the city seek to profit from the scale of modern development attracted to the waterfront or restrict density while enlarging recreational space? Should the city favor preservation or risk losing evidence of its history by too readily welcoming the future with new development?

These are precisely the questions confronting the leaders of Washington D. C. as they embark on a plan to reengage the capital with the Anacostia River. For most of the 20th century the Anacostia was hardly regarded as a city-building amenity. Quite the opposite, both geographically and symbolically the Anacostia stood for demarcations; between the national monuments at the core and peripheral settlements, between economic well-being and poverty, between more and less desirable neighborhoods, between largely white and largely black population centers. Long assumed to be less important to Washington than the Potomac, the fortunes – and image – of the Anacostia steadily declined. It gradually yielded its natural beauty to industrial (primarily military) infrastructure; absorbed too much of the region's surface run-off and pollutants; gave its banks over to highway and railroad corridors; and even began to disappear from local maps which, of course, focused on the monumental core.

But what if such neglect and negative associations could be reversed? Under the leadership of Mayor Anthony Williams, and by agreement among 20 District and Federal agencies, the Anacostia Waterfront Initiative (AWI) was launched in 2000. The AWI is not simply about compensating for long-standing land development shortcomings. The initiative is equally motivated by the realization that the Anacostia River environment offers one of the best opportunities for the District to accommodate growth, remaining competitive with its growing region. Along and near the shores of the Anacostia there are upwards of 900 acres of land – nearly 90 percent in public ownership – ready to be transformed into a model of 21st century urban life. There is space to add between 15,000 and 25,000 new mixed-income households; to build 20,000,000 square feet (2,000,000 square meters) of commercial and retail space; to create miles of trails and parks, and to connect these to neighborhoods, existing parks and natural areas. There are historic neighborhoods to be revalued and renewed. There is even the opportunity to enlarge the territory on which governmental functions, national institutions and monuments can locate, lessening the burden on the

monumental core. This is all quite important for a city in the early stages of a comeback following several decades of losing population and business to a prospering region.

The District today is experiencing modest population and job growth, a market for urban housing, and the accompanying search for life-style amenities and unique places that service and knowledge economies seem to demand. Yes, there are ample worries that a new focus on the Anacostia will hasten gentrification and displacement rather than sustain adjoining neighborhoods. But there is also great optimism. At one end of the river are the environments of the Washington Channel marinas, Haines Point and the Tidal Basin. At the other are the Kennilworth Gardens and the National Arboretum. With such cultural and geographical anchors, the history of prior uses, and a capacity for change (partially by lying neglected for years), the Anacostia River is wonderfully poised to serve the city anew. The key will be the wisdom with which unnecessary polarized views about its future can be reconciled by a common conviction that along its 8-mile (13 kilometer) length both preservation and reinvention can be accommodated well.

5. A city's waterfront should not be thought of as a thin line.

Land/water relationships are often thought of in terms of opposites, or of the edge between the two. Metaphysically this edge is razor thin. In terms of city-building the opposite is true. Places like Amsterdam, or Sydney, or San Francisco make this quite evident with their complex land/water weave. Even when geography offers less variation, the broader the zone of overlap between land and water the more successfully a city captures the benefits of its water assets.

It is generally easier to attract investment to the very edge, and over time construct (even overbuild) a facade to the water. Most cities possess at least one great linear avenue along their waterfronts, such as the Bund in Shanghai, the Malecon in Havana, the Avenita Maritima in Las Palmas. These avenues serve as prominent addresses, collect visitor accommodations and host celebratory events (although they sometimes evolve to highway scale due to traffic). They deserve much attention. Yet, the allure of this 'thin-line' -- conjure up an image of Miami Beach from the air -- must be balanced by thinking in terms of perpendiculars to the water's edge. Many cities who have opted for a tall or dense edge of development right at their waterfront, experience a precipitous drop in land value a block-or-two away from the edge, and with it a drop in the quality of the town environment away from the water's edge.

Managers of harbors and port authorities, advise *getting in* to the water, figuratively, by blurring the suddenness of the edge, and literally, by making sure that remaining and potentially new industrial, transportation or recreational uses of the water sheet itself influence the land-side planning. Avoiding the less desirable consequences of a thin line of development depends on the public's success in creating perpendicular streets and civic corridors that become equally desirable addresses. Bostonians, for example, hold dear their "fingers-to-the-sea," the system of colonial streets (many still prominent today) that were virtual extensions of the piers and wharves far unto the Shawmut Peninsula. Developing the potential of such perpendiculars is often the key to comprehensive planning for both land-side and water-side improvements.

Cincinnati's 'thin-line' developed at some distance from the Ohio, historically due to the seasonal flooding of the river. As in many American cities the local street grid to the water was severed by highways originally thought to increase accessibility to downtown waterfronts. But a new planning agenda is emerging. Boston's Central Artery (on its way to being placed below ground), San Francisco's Embarcadero Freeway (partially succumbing to an earthquake, then removed), New York's West Side Highway (demolished in parts) provide three famous examples, and Cincinnati is following suit. It's Fort Washington Way, sounding benign but actually a segment of I-75/I-71, cut off the downtown from its riverfront when constructed in the early 1960's. It has just been partially depressed and its 600-foot (200 meter) right-of-way narrowed by two-thirds. This allowed five

streets of the downtown grid to continue directly across the highway to reconnect the downtown with the Ohio River. In combination with a planned major riverfront park, two new ballparks (to replace Reds Stadium which sat on a high podium of parking obstructing even views of the river), an Underground Railroad/Freedom Museum, and supporting mixed uses, a thick scar between city and river is being healed.

6. The long-term value of a waterfront should not be endangered for short-term riches

One of the most poignant observations pertaining directly to the seduction of the “thin line” was made by Mario Coyula, the director of planning for the Havana capital region, at a recent waterfront conference. Confronted with a dire need to improve (indeed, to create) an economy, and with international tourism offering a very tempting vehicle, Havana is struggling with how much of itself to offer and how quickly. “Do not lead with your best sites,” Coyula advised, “the early investors want the best locations but do not do the best projects.” How true this rings for cities that too quickly accept second-rate development proposals or engineer entire redevelopment plans around specific sites to enhance commercial real estate, or ‘jump-start’ waterfront renewal.

Among the current development trends yet to be proven of durable value is the introduction of very large draws such as stadiums, convention centers, casinos right at the water’s edge and the like. Cleveland, Cincinnati, Detroit, Pittsburgh, San Diego are a few of the cities that have done or are trying to do so. Such big things do have the capacity to bring substantial public resources and energize (for awhile) local leaders and the public. The problem comes when a city feels its work is done simply by attracting one of these facilities to its waterfront. In San Diego, for example, the introduction of a huge convention center and tall hotels to the South Embarcadero bayside more than a decade ago brought many conventioners, but also a palpable emptiness when they were (as usual) inside the facility, or not in town between booking dates. Stadiums also animate their immediate environments sporadically, and with insufficient adjacent mixed-use development around them (often the case) leave the area feeling extra empty once the sporting event or concert ends. Even cultural facilities whose “action,” with few notable exceptions, takes place largely indoors, require extra attention to their outdoors and other uses to join them cheek-by-jowl before their presence can sufficiently animate a waterfront.

Perhaps strategically, Boston’s new convention center is being built about a half-mile from the water *but is being touted* as a Seaport attraction. The expectation is that from its front door to the waterfront a vibrant perpendicular mixed-use corridor will evolve. And in San Diego a new master plan for the mile-long North Embarcadero area is in contrast to its South Embarcadero neighbor, featuring many more perpendicular streets connections and view corridors, a more continuous esplanade at the bay, and a much broader variety of uses including more housing.

In a different context, consider how unusual, and so far successful, Bilbao’s efforts have been. First, and quite consciously, they set out to improve local self-esteem and enhance the region’s image internationally through several cultural projects, most notably the Bilbao Guggenheim Museum. Now they are pursuing more conventional redevelopment efforts, including a substantial commercial development at the river between the Guggenheim and their even newer opera house. Josu Bergara Etxebarria, the President of the Provincial Council of Bizkaia, often speaks about the strategic goal of using culture as a tool for development, not just real estate development itself. The Bilbao lesson is that to compete globally may involve substantial recasting, rather than more narrowly preserving, a city’s waterfront image and use.

Many cities are paying attention and responding. At the end of Wisconsin Avenue, facing Lake Michigan, the great brise-soleil wingspan of Sanitago Calatrava’s just-completed addition to Milwaukee’s Museum of Art presents an image as compelling (and reminiscent of) Frank Gehry’s Bilbao Guggenheim. Yet, it remains unclear whether cities are drawing sufficient insight from

Bilbao's experiment, or casting their hopes too narrowly on the catalytic potential of an arresting architectural icon along their waterfront.

7. Waterfronts come alive when they must become places for people to live not just to visit or recreate.

The mayors of many prominent waterfront cities, Mayor Sartor of Sydney among them, argue the importance of maintaining a "living city," even as pressure to yield to financially more lucrative commercial development grows along thriving waterfronts. With a number of American cities experiencing growth demands in market-rate and luxury housing, waterfront sites are naturally appealing. The city of Minneapolis has, for example, built over 5,000 housing units at its central riverfront in recent years following decades of seeing little downtown housing constructed. Cities at both coasts are witnessing similar trends.

The most determined campaign to increase housing has been Vancouver's, whose "Living First" slogan hammers home the idea that residents are as important to cities as anything else. Taken within a North American context, where industrial-era cities have been shedding population to their suburban peripheries for half-a-century, it is a crucial insight. Starting in the 1980's Vancouver began the transformation of its several downtown waterfronts from industrial and rail uses with the goal of adding as many as 25,000 mid-to-high density housing units, and by century's end was well on the way to achieving this goal.

The city's planning director, Larry Beasley, speaks of using waterfront locations to create a competitive advantage for downtown living against the allures of the suburbs. He calls density, congestion and even high-rise housing "our friends" in creating lively, mixed-use urban lifestyles. He notes the city's adamant refusal to upgrade its highway system specifically to make it harder for people to commute from the periphery thereby inducing them to select in-town housing. Until recently such talk would have seemed naive in most American cities, and perhaps for some, sounds improbable still. Yet, to experience Vancouver today is to understand what 'living first' means. Housing has created demand for virtually everything else: new services, shopping and entertainment, public transportation, and open space.

Creating great places to live in the heart of Vancouver and Boston were early policy priorities, not a later consequence of other initiatives. Curiously then, there is a concern in the emerging Boston Seaport District that planning for a lot of housing will crowd out other uses, overly densify and privatize the waterfront. Regulations can control building mass, the casting of undo shadows, the loss of public access, and can ensure that the edge is maintained continuously for public purposes (as, indeed, is the law in Boston). However, in all but the most extreme circumstances of density (or incompatibility with still vital port uses) having more people living in the proximity of the waterfront is a long-term competitive advantage for a city. To once more evoke the miles of dense housing stretching along Chicago's lakefront, the idea of living coming first seems to be a very urbane one.

8. The public increasingly desires and expects access to the water's edge.

The number of cities with limited public access to their waterfronts outnumbers those that provide it generously. Various historic impediments -- from physical barriers, to riparian rights, to flood zones, to long-standing uses and habits -- have made this so. But the citizens in those cities who have made their waterfronts accessible to the public --as Chicago began doing nearly a century ago -- do not regret the results. Nor has Chicago's real estate community which continues to build in as large a scale and in as close proximity to the public lakefront as regulatory processes allow.

The city of Providence has gone so far as to dig its river back up, having entirely covered long stretches of it for freight yards and road infrastructure during the 19th century. The resulting

investment in the vicinity of the newly resurfaced river has helped reinvigorate a downtown that had struggled for decades. The now day-lighted river has itself become a star attraction for various events and celebrations, including a remarkable river bon-fire and music spectacle that attracts tens of thousands of people from around New England twice each summer month.

In Louisville, Kentucky a new 100 acre (45 hectare) park on the flood banks of the Ohio River has similarly begun to pull the downtown closer towards the river – not with buildings but with a wonderfully varied recreational landscape. Because of the propensity of the Ohio to flood, the city had historically protected itself against the river with broad banks, on which, predictably, it later built an elevated highway, making it even harder to reach the water's edge. The ingenious design for the new park, by Hargreaves Associates, passes underneath the highway and transforms a stretch of those banks into an environment that makes people more aware of their river's seasonal movement and its indigenous riparian plant life, even as it remains part of the city's flood protection. The park's popularity was immediate, and pride in the accomplishment led the Jefferson County School Board to publish "Waterfront Park: A Curriculum Guide". The manual uses the new park and its design as a springboard to describe the environmental and social history of the river and city to school kids. It is distantly reminiscent of the famous *Wacker Manual* read by generations of school kids in Chicago, and based on the 1909 Plan for Chicago by Daniel Burnham which, not incidentally, first pointed Chicagoans towards Lake Michigan for cultural and recreational purposes.

Among the most sweeping current endeavors to reclaim a waterfront for public occupation involves Toronto in cooperation with its 31 sister communities stretching along the Canadian shore of Lake Ontario. Over the past decade a deceptively simple common vision of a continuous trail has resulted in over 100 separate projects combining to produce over 200 miles (320-kilometer) of public trail, and the determination to double this again to connect the full 400-mile (640-kilometer) shore of Lake Ontario! Motivated by the twin goals of regeneration and public access, the greenway trail already links nearly 200 natural areas, 150 parks, promenades and beaches, dozens of marinas, and hundreds of historic places and cultural institutions.

An organization called the Waterfront Regeneration Trust, founded in 1990 as a follow-up to a Royal Commission on the Future of the Toronto Waterfront, has acted as facilitator, partner, conscience, cajoler, and primary promulgator of the regional vision. Its kindred-spirit organization, the Toronto Waterfront Revitalization Task Force, has recently published its own plan -- supported by a commitment of one billion U. S. dollars of public funding to invest seven billion dollars more along a several mile-long stretch of the city's waterfront. Again, the ambition is stunning. In addition to reclaiming obsolete or marginal industrial and port properties and creating green space, the plan anticipates a new work and living environment for 100,000 people on 2,000 acres (900 hectares) of previously industrial land adjacent to the downtown. Toronto's determination to substantially expand its lakeside public realm will surely continue, as it will in Cincinnati, Louisville, Pittsburgh, Providence, San Diego, Washington D.C. and in numerous other cities coming to realize the value of attractive and public shores.

9. The success of landside development is intrinsically tied to the appeal of the water and its uses and, of course, to the environmental quality of both the water and the shore.

Like Toronto's waterfront, Detroit's river -- the water link between lakes Erie and Huron -- is designated as one of 42 Great Lake areas of concern by the International Joint Commission on the Great Lakes. Over its history, Detroit has used its river to great benefit and abused it thoroughly. As a result the only development that the river has hosted during the past several decades was built to face away from it. When to great fanfare Henry Ford's Renaissance Center opened around 1980, signaling a major corporate reinvestment in the city, the complex ignored the Detroit River entirely, though it was located next to it. The "Ren Cen" was equally rude along its city-side, barricading itself behind highway-scaled approaches and fortress-like service structures at street level. Such

defensive tactics neither helped the downtown nor the riverfront, nor ultimately the status of Ren Cen itself.

Along the river a self-fulfilling tendency was at work. Exhausted from its long service to heavy industry, the river was out of sight and terribly polluted, and so out of mind, the city continued to recoil from its untended edge. Even Belle Isle, the majestic 1,000-acre (450 hectare) Olmstedian island park, began to deteriorate and lose visitors because of inadequate maintenance, and because getting there meant negotiating the quite off-putting environments along the river.

The degradation did not occur at once and neither will the regeneration, especially given Detroit's still fragile overall urban recovery. Nevertheless, a half-dozen initiatives are underway, pursued collectively under the recent designation of the Detroit River as one of 14 "American Heritage Rivers," enabling bordering communities to seek federal funding. The work focuses on brownfield recovery sites; reduction of contaminants in the river and along the banks; the replanting of native trees and grasses to help stabilize the shoreline; cleaning a natural bayou dubbed the "Black Lagoon" due to its toxicity; and the reintroduction of several native habitats on Belle Island as part of its revitalization. The long vision, not unlike Toronto's, is of a continuous string of public open spaces and greenways stretching some 20-miles (13 kilometers) along the river, including a downtown waterfront park which opened in 2001 in commemoration of Detroit's 300th anniversary.

As in Pittsburgh and other "rust belt" cities from Gary, Indiana to Gdnask, Poland the painstaking, slow and expensive process of redefining the role of a body of water is underway. Each initiative in Detroit is intended to prepare the river edge to receive, rather than repel, both new investment and urban life. (Although a recent plan, for the moment in remission, to place several large casinos at the river would not produce so lively or public an edge.) But the Ren Cen's new owner, General Motors, is properly responding to the river's regeneration, adding a monumental winter garden as part of a major transformation of the complex which -- miraculously, and at long last -- opens out directly to the river.

10. Distinctive physical settings, typically found at waterfronts, provide significant advantages for a city's competitiveness in the global economy.

In Detroit, the eventual gain from its process of river recovery in economic and civic terms will be no less -- and likely be more long-lived -- than that initially achieved by tapping the water's potential for industry alone. Geography in the post-industrial era is a magnet for reasons beyond the opportunity to extract natural resources or command a trade route. Beautiful places today attract people and investment. And keeping them beautiful -- taking advantage of their distinctiveness -- is one way to minimize the tendency of modern development to produce generic environments.

While Genoa's natural (and historic) harbor is no longer adequate in size for modern cargo shipping, its shape is an even more powerful orienting device for the sprawling modern city-- as if some centripetal force were focusing the entire city unto the old harbor. This condition of centering proved very useful as the city began to reinvent itself to become a cultural and tourist destination in anticipation of the world-wide commemoration of the 500th anniversary of the Colombian discovery of America a decade ago. In a prior epoch the unique land and sea geography facilitated the creation of a well-scaled, well-protected urban port. Today the same geography accommodates and highlights a diverse and spatially-contained realm of contemporary businesses, institutions, residences, and visitor facilities all in view of and surrounded by the layers of Genoa's prior incarnations.

The canals of Amsterdam, the intricate pattern of docks and queys of Sidney, the more recently constructed forest of residential towers in Vancouver, or that impossibly-dense wall of skyscrapers facing Hong Kong Bay are those cities' counterparts to the distinctive land-sea relationship in Genoa. Indeed, visits to many cities located on major bodies of water leave powerful impressions of place, as waterfront cities in various incarnations have for centuries. The value of

these proverbial postcard views is not to be dismissed. As we begin the new century, ‘globalization’ represents, on the one hand, an opportunity for cities and nations seeking access to broader markets and, on the other hand, a risky road towards a homogenization of culture and the loss of local identity. Local geography, uniquely reinforced by a special pattern of urbanization – especially in relationship to a body of water – can facilitate the goal to compete globally while avoiding genericism or mediocrity.

The makers of emerging economies increasingly choose where to work and live on the basis of “life-style” amenities offered by a locale. Surveys tracking locational choices among high-skilled workers consistently show that in addition to broad choices in particular job markets found in an urban area, the presence of culture and arts; a healthy environment and natural amenities; opportunities to pursue active lifestyles; a strong “sense of place;” socially diverse and progressive-minded populations are all important factors. In short, the various ingredients providing opportunities for blending work and leisure prove influential. Access to water, both for recreational purposes and for the ambience that waterfront settings provide for cosmopolitan venues is a key attractor. A lively waterfront will attract global markets and possibly forestall the ‘this could be anywhere’ syndrome of much current development. Just about every waterfront city should aspire to be called, like Genoa, superb.

For a myriad of reasons waterfronts always have been attractors *par excellence*. If access to bodies of water was long essential for sustenance, transportation, commerce and industry, it is now necessary for seemingly less tangible though hardly less important human needs. The City of Toronto lists its three “pillars of city living” as community, economy, and environment. These are also the cornerstones of those who champion more sustainable urban futures. Community, economy and environment: where else but along a city’s waterfront can these so propitiously come together? As usual, Jane Jacobs expressed it most succinctly: “The waterfront isn’t just something unto itself,” she pointed out, “it’s connected to everything else.” Waterfronts *are* those places in a city where nature and culture best meet, and, thus, will remain the most dynamic territories for urban – and one hopes urbane -- development.

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