cela
COUNCIL OF EDUCATORS IN LANDSCAPE ARCHITECTURE

Landscape Legacy
Landscape Architecture and Planning Between Art and Science
May 12-14, 2010, Maastricht, the Netherlands

ISOMUL

(RE)DISCOVERING LOST CONNECTIONS: RESTORING THE RELATIONSHIP BETWEEN CITY AND WATER

Amitabh Verma[1]

The relationship between human settlement and water has been one of constant transformation and evolution. Recent global trends indicate an increasing reconciliation between cities and their aquatic edges, deriving from a reevaluation of water's value in the urban environment and the necessity to maximize its aesthetic, functional and ecological contributions. While several cities around the world have sought to reinterpret their relationship with the waterfront, many smaller cities have often lacked commensurate incentives for undertaking this examination. This paper addresses challenges and rationales for waterfront revitalization in smaller communities situated along rivers, specifically investigating possibilities for riverfront reclamation in Athens, Georgia, located in the southeastern United States. Assessing relevant contexts, it traces the physical and ideological marginalization of the Oconee River and argues that it must be made 'visible' as an integral component of the built landscape to authenticate the urban experience. It offers theoretical exploratory strategies to reclaim the Athens waterfront as a meaningful social, aesthetic and ecological public space. Further, it presents illustrative examples from student work deriving from a pedagogical application of this theory in a course on Urban Design taught in 2009.

1 GLOBAL URBANIZATION AND WATER

1.1 Evolving Perceptions

The establishment of human settlements around the world has historically manifested an intimate physical connection with water. The river in particular, as "the arterial bloodstream of a people" (Schama, 1995, p. 363) has been a locational determinant of civilizations as well as their urban centers from earliest times (Hawkes, 1973). This seminal link, transcending millennia, is apparent in the nomenclature of the ancient Indus Valley civilization of 2500 BCE (Ching et al., 2007, p. 11) as well as in the placement, in the same approximate region 4500 years later, of Le Corbusier's Chandigarh along a creek in the north Indian plain (Evenson, 1966). This innate dependence persists even as human society has undergone significant transformations over time, its nature reflecting multifaceted contexts of habitation and cultural, religious, social, geographical and climatic variations. Most cities in the world have an intimate bond with water in some form, even as the foundations of these relationships express divergent motivations. Chicago's exploitation of Lake Michigan and the Chicago River for its exceptional development into an economic powerhouse, Varanasi's derivation of its sanctity from its distinguished location on the banks of the holy Ganges, the genesis of Paris on an island in the Seine, and the sustained struggle of Dutch urbanization against the sea, are just a few examples bearing testimony to the complex role that water has played in defining the identity of cities. The intimacy of this relationship is underscored by the fact that for numerous cities around the globe, "… waterfront views now serve as the symbolic image" (Eckstut, 1986, p. 27).

The perception of water and its value to society have been variously molded by distinct social, cultural and even religious parameters. Its primary perceived value as a versatile utilitarian resource (used for nourishment, sanitation, agriculture, conveyance, defense and commerce) was complemented by recognition of its aesthetic merit, evident in cities founded in locales of exceptional beauty. With the advent of industrialization, this early utilitarian-artistic perspective was succeeded with one purely utilitarian, with water's usefulness in the advancement of economy and technology overshadow-

[1] College of Environment and Design, University of Georgia, 609 Caldwell Hall, Athens, GA 30602, USA averma@uga.edu

ing other attributes. The initial visioning, partially guided by an artistic framework, was supplanted by later, predominantly scientific interpretations. The increase in global urban development, industrialization and population in the previous two centuries has aided this marginalization of other aspects of its identity (Kaika, 2005). Frequently, the environmental degradation accompanying industrialization culminated in despoiled waterfronts purged of natural purity and aesthetics. In many cities around the world, the degraded waterfront ceased to be an integral asset, and a formerly intimate relationship devolved into contentious coexistence. In extreme cases, the river was even viewed as an element of ugliness, to be hidden, shunned or ignored.

In recent years, awareness of the limited future availability of water due to exploding human populations and depleting resources has led to its identity in contemporary discourse being predominantly viewed through the prism of ecological conservation. Underwritten by notions of sustainability, responsible management and communal stewardship, this philosophy is increasingly shaping popular opinion as well as policy in many places. This environmental awareness, coupled with a recognition of the waterfront as an invaluable element of urban richness, has precipitated a waterfront reclamation by cities around the globe, which, recognizing the unrealized visual and social value of this natural asset, have reclaimed the waterway in meaningful expressions of citizen engagement. San Francisco (Brown, 2009), New York (Seccombe, 2007) and Melbourne (Dovey, 2005) have recently undertaken concerted efforts to convert their polluted, dilapidated or abandoned aquatic edges into exceptional communal spaces with diverse recreational, educational and commercial uses. The sites of former shipping yards, industries and loading docks now house museums, parks, boardwalks and beaches, transforming problematic zones into components of enrichment.

Toronto, Canada, offers perhaps the most vivid example of this psychological and physical transformation, encompassing both acceptance and rejection of water, in this case the Don River. Hough (1995) narrates how the initial appreciation and exploitation of the river for the city's founding was supplanted by its portrayal as an impediment to development, culminating in the channelization of its waters into an unnatural perpendicular turn as it enters Lake Ontario. In the 1990s, however, rising concern about such environmental deterioration propelled citizen and governmental collaboration towards the renewal of the river, later expanded to include the entire watershed. Today, Toronto is engaged in remaking the lakefront into a continuous public realm (Figure 1, 2), with prominent designers creating landmark civic spaces along the entire 10 km (6.25 mile) shore (Arvidson, 2008). This ambitious process, while restoring environmental integrity to the landscape and creating innovative social opportunities for citizens, will also generate several thousand jobs (Waterfront Toronto, 2009), thus ameliorating Toronto's ecological, civic and economic environments simultaneously.

Figure 1: The Toronto Music Garden, conceived by cellist Yo-Yo Ma, one of the public spaces reimaging the lakefront

Figure 2: Behind, remnants of an industrial past

1.2 Challenges for Smaller Cities

This process of correcting historical missteps necessitates examination in an altered context for smaller cities, where it may lack the level of exigency evident in larger cities. While cities situated along shorelines, with alternate priorities and motivations, have approached this issue differently

(Goodwin, 1988), this study specifically addresses strategies for smaller cities located along rivers. The differences arise from the specific identities of such cities and the comparably diminutive rivers on which they are typically located. Although historically vital to the founding and sustenance of these cities, smaller waterways, lacking both the physical presence of larger rivers as well as their economic and recreational potential, are easily discounted as worthful contributors in contemporary circumstances. Their prior economic advantage has been rendered irrelevant by technological advances or the obsolescence of industry, devaluing their financial worth. Their natural environments, often degraded by historical depredations, are seen as detrimental to urban aesthetic quality. Their modest physical size enables an easy visual marginalization and an orientational deflection on the part of the city, something which is difficult, if not impossible, to achieve in case of larger rivers or shores. This absence of obvious incentives, coupled with the possibility of a facile disengagement, can defer the examination of the contemporary role of these formerly-vital components and consequently, pose challenges to the allocation of efforts and resources to their revitalization.

There exist, however, convincing reasons to advocate such remedial action and a rethinking of the role that water should play in smaller communities. It is argued that even in situations without tangible incentives for riparian restoration, measures to reestablish meaningful relationships between cities and their rivers are counseled by ecological and historical imperatives. Firstly, even if currently relegated to a place of insignificance (or irrelevance), the river remains part of the genealogical cultural landscape of the city and helps communicate a narrative which contextualizes current forms, processes and identity. It is, therefore, an indispensible record enabling an authentic reading of the city, both in the life of its residents as well as in the experience of the visitor. Secondly, recent urbanization trends across the country have precipitated an ecological crisis of which polluted, abandoned rivers are perhaps the most iconic, vivid and accessible testaments. This paper proposes that reintegrating the river into the urban experience – thus making it *visible* – can focus public cognition on its deterioration, stimulating efforts to arrest the continued degradation of the river and its dependent ecosystems, ultimately fostering broad-based attitudes of conservation, protection and stewardship toward the greater environment in the entire community.

The phenomenon delineated above characterizes numerous small- to medium-sized cities in the American southeast. Although each individual city is unique, common patterns of the altered perceptual and functional significance of water are discernible in broader approaches to the waterway. Common evolutionary trends of early industrial establishment, followed by overuse and excessive exploitation of the water source, and the subsequent redemptive process are demonstrated in varying stages in cities such as Chattanooga, Tennessee, Greenville, South Carolina, and Augusta, Georgia. While Chattanooga and Greenville have implemented highly successful plans for urban revitalization of their rivers, Augusta is contemplating strategies for future riverfront development to resuscitate formerly vibrant sections of downtown.

2 INVESTIGATING STRATEGIES FOR ATHENS, GEORGIA

The above phenomenon is manifested in the devolution of the Oconee River in Athens, Georgia from a vital lifeline to an object of tentative and undefined purpose, with an identity devoid of clarity. This study analyzes the urban evolution of Athens and explores potential strategies to accomplish the broader objectives of riverfront revitalization and urban reintegration stated above. To facilitate the realization of these goals, it addresses site-specific conditions and assesses the city's historical, cultural and social moorings. It seeks to complement previous efforts at reinventing the river's identity which succeed in only partially realizing its potential. The recent development of Dudley Park and the establishment of the Greenway Trail along the floodplain of the Oconee create linkages to Sandy Creek Nature Center, incorporating the river into a larger map of ecological appreciation and offering recreational activities within a natural setting. Although this approach provides enhanced opportunities for interaction between the public and the river, its particular emphasis on naturalistic recreation is restricted in its appeal, eliminating a large demographic for reasons of aptitude as well as convenience. This focus on ecological identity also ignores crucial connections and references to downtown.

This study advocates an alternate interpretation to achieve the comprehensive reintegration of the river with the city, and proposes framing it as an urban epicenter and as an extension of downtown. This, it is posited, is likely to attract a broader and larger demographic, thus maximizing opportunities to highlight its presence in public cognition and attaining a more successful insertion of the river into the city. Drawing from this assessment, this study seeks ways to:

- Reestablish visual and psychological connections between Athens and the Oconee River

- Enhance and enrich the urban experience of Athens for visitors and residents

2.1 The Oconee River in Historical Context

As in many other cities in the south-eastern United States, there exists evidence of prehistoric human settlement within the larger area surrounding Athens. Its recorded beginnings, however, date from the late 18th century, when a trading post named Cedar Shoals was founded on the banks of the Oconee River. The most significant development in the growth of Athens was the granting of a charter by the Georgia General Assembly on January 27, 1785 for the establishment of the first state-supported university in the country. The actual establishment of the university took place in 1801 with the selection of 633 acres of land along the Oconee, adjacent to the original trading post. Among others, the natural beauty of the river and presence of numerous springs were factors which influenced the decision (Hynds, 1974, p. 4). The area surrounding this institution of learning was christened Athens, in homage to the ancient Greek center of philosophical and intellectual thought. The role of the river in site selection is elucidated in this early description (Hull, 1906):

> The river at Athens is about 150 feet broad; its waters rapid in their descent and has no low-grounds. The site of the University is on the South side and a half mile from the river. About 200 yards from the site, and 300 feet above the river, in the midst of an extensive bed of rock issues a copious spring of excellent water, and in its meanderings to the river several others are discovered. (p. 2)

The emergence of the University of Georgia supplanted industry as the economic, ideological and cultural determinant of the city's development and correspondingly diluted the primary importance of the river, although Athens continued to rely on it for its remaining industry and for drinking water. It also ensured that the deterioration of the river's condition was impacted by detachment on the part of the city rather than from abuse inflicted by industrial exploitation. The role of the river appears to have been discounted at an early date – an official guide promoting the virtues of Athens published by the city government in 1951 makes no mention of the river, except as the site of the water-works plant constructed in 1893 (City of Athens, 1951, p. 47). This perceived ideological irrelevance which both persisted in, and guided, physical growth patterns of Athens today renders the Oconee essentially invisible in the average daily experience, underutilized and underappreciated (Figure 3,4).

Figure 3: The Oconee in downtown Athens, looking north from the E. Broad St. bridge

Figure 4: View south, revealing the undefined urban edge and neglected character of the river

2.2 Analyzing the Geography of Downtown

The fragmented linkage of Athens with the Oconee as a consequence of the establishment of the University of Georgia is reflected in the physical organization of the city. The university-city dynamic, which became the predominant determinant of the identity of Athens, continues to define its development, the ambience still molded by Town-and-Gown duality. The University is the primary economic growth generator and a significant physical presence within the city. An observation of downtown reveals a clear delineation of the city and university by the main traffic artery, Broad Street. Running roughly east-west, this primary street constitutes the shared permeable edge between the university and the city. This extended zone of active interchange manifests diverse functional, aesthetic and

Figure 5: Broad Street façade in downtown

Figure 6: College Avenue, looking north

architectural variety, represented by a range of restaurants, coffee shops, bars and miscellaneous businesses (Figure 5) facing the verdant campus and the venerable buildings of the university to the south.

The space with the most import is the tripartite intersection of the university, the edge and the city, monumentalized by the Arches, the iconic emblem of the University of Georgia and the visual terminus of the major cross street, College Avenue (Figure 6). This epicenter of public movement, as the most frequented and socially-invested space, has emerged as the *de facto* city center, with City Hall occupying a subordinate position psychologically. The closest approximation to a public plaza, it is occasionally utilized as a venue for festivals, concerts and communal celebrations when, closed to vehicular traffic, it is translated temporarily into a pedestrian space. It is the most vibrant, colorful and socially-rich space in the city, serving as the characteristic image of Athens in popular perception. The location of this gravitational point at a distance from the Oconee further abets its alienation, as the westward orientation of the city in response to the university's founding compelled a turning away from

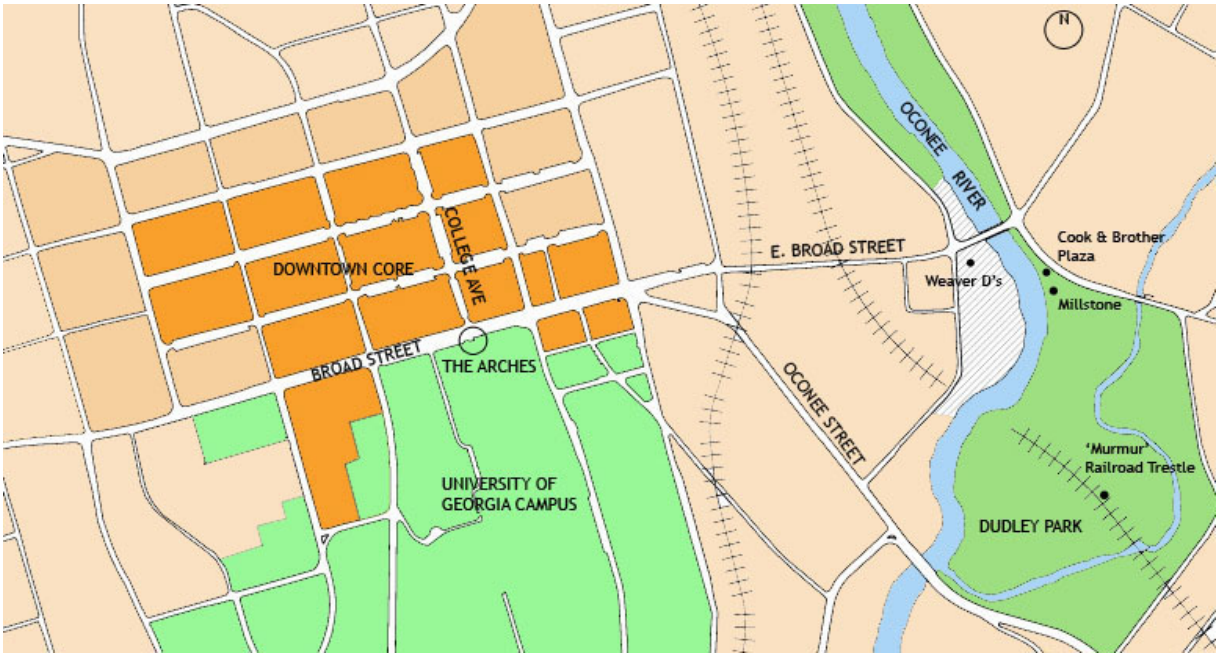

Figure 7: The spatial organization of the city, university and river

the river, relegating it to what was then the outer periphery. Although the symbolic Broad Street provides a physical link between the three primary components (Figure 7), it is unable to make a substantial contribution to the Oconee's reinforcement as the segment continuing to the river, East Broad Street, carries little traffic and does not possess significant aesthetic or social value (Figure 8). Its for-

mer importance has been assumed by Oconee Street which, as US 78, is designed for high automobile speeds and does not adequately acknowledge the river. The orientational discord between Broad Street (running east-west) and the Oconee (flowing north-south) further impedes interaction by precluding visual connections that could reinforce their relationship. Their sole intersection occurs when E. Broad Street fords the river. Although this juncture is marked by a distinctive metal bridge with clear connotations to an industrial past (Figure 9), it is located at a considerable distance from downtown and this disconnect limits meaningful participation.

This region, however, contains invaluable icons which, if appropriately contextualized, will contribute substantially to the uniquely colorful personality of Athens. Denoting diverse aspects, they are

Figure 8: Undefined character of E. Broad St.

Figure 9: E. Broad St and Oconee intersection

commemorative markers of the historic roots of the city, constituting locally significant cultural references which can add layers of richness to the urban experience. Archaeological references to ancient industries such as the Waterwheel (Figure 10) and Millstone (Figure 11) have been developed as interpretive historic sites, with appropriate informative signage (Figure 12) describing the crucial and multifaceted role of water in the development of Athens. They communicate information about the origins of Athens as well as subsequent stages in its history, such as its role during the Civil War. No less

Figure 10: Monument to the historic waterwheel...

Figure 11: … and to the grist mill

valuable are adjacent icons of unique cultural import, such as Weaver D's restaurant (Figure 13) and the Murmur train trestle, both famed for their association with the popular music group R.E.M., and thus treasured as exceptional embodiments of indigenous culture. They reinforce Athens' image as a creative, unconventional and irreverent college town with a prominent artistic dimension, and although presently lacking relationships to each other or to the larger canvas, they can nevertheless be invaluable in organizing their surroundings into a comprehensive map of multiple meanings. The cultural, historical and educational values invested in these potent but fragmented remnants of Athens' identity must be woven into the larger map to maximize their contribution to the overall story.

The cohesive integration of these references in the common experience is currently obstructed

by the Oconee and its floodplain, which, as a neglected boundary, becomes a barrier between these sites and downtown. As appropriately integrated components of a larger organizational form, however, they can potentially constitute an unusual experience of Athens for residents and visitors. The realization of this goal will be contingent upon a transformative representation of the river from a “line of separation”, as Appleton (1996, p. 89) defines it, to “one of intercommunication”.

Figure 12: Site marker providing narrative

Figure 13: Weaver D’s Delicious Fine Foods

3 EXAMINING PRECEDENT: GREENVILLE, SOUTH CAROLINA AS CASE STUDY

An illustrative and relevant paradigm of the successful integration of a forgotten river is found in Greenville, South Carolina, which demonstrates a historical and logistical profile comparable to Athens. Greenville was founded around 1770 with the construction of a gristmill on the Reedy River by the first European settler. The precise site of the city’s founding – on the Reedy Falls – is proximate to downtown, but on the periphery. Following the trajectory common to similarly-sized cities in the south, it developed as an industrial manufacturing center, earning the epithet “Textile Capital of the South” (Huff, 1995, p. 276). The proliferation of industry subsequently precipitated severe degradation of the river’s waters in the early decades of the 20th century. Further, following the nationwide pattern of damage inflicted by suburban malls and shopping centers on formerly-thriving downtowns, Greenville’s city center degenerated into a spectacle of urban blight and devastation (Nolan, 2008).

A conscious and focused program of downtown revival was initiated in 1967, aiming to remake the downtown environment as a place of aesthetic, commercial and recreational vitality. The renewal project included a range of strategies such as streetscape redesign, public place creation, and environment amelioration. It was, however, the reinvention of the Reedy River Falls as the organizational focus of an urban park that arguably became the most potent stimulant of revivification. The initial Vision Plan (Sasaki Associates, 1999, p.2) identifies the objectives of the effort:

1. Maintain public access and parkland along the river.
2. Create a series of unique and connected focal points and destinations along the river.
3. Link the Corridor to adjacent areas and regional attractions.
4. Simplify the visual landscape.
5. Improve water quality of the river…
6. Create potential development areas…
7. Reinforce primary retail on Main Street and in the West End.

The subsequent Reedy River Master Plan (Clemson University, 2002) further reiterated and supported these postulations, while enumerating the historic, aesthetic, economic and environmental advantages to be derived from a sensitive and contextualized reimagining of the Reedy River.

The proposal to restore the river’s original beauty and purity, coupled with the development of its environs into an assemblage of promenades, gardens and plazas culminated in a public space of exceptional value and a remarkable destination which radically altered the identity of the city. The revitalization efforts focused simultaneously on restoring the pristine quality of the river and its surroundings, as well as on converting the ambient space into public recreational areas which would provide incentives for social interaction with the river as the focus. The park also incorporated historical references such as industrial remnants (Figure 14, 15) into the broader fabric of subsequent development,

providing clarified connections between the diverse stages of the city's growth which would otherwise remain unrecognized and unappreciated.

Figure 14: Old Wyche Pavilion, pre-renovation (Source: City of Greenville)

Figure 15: Old Wyche Pavilion as it is today

One of the most significant decisions taken to ensure the appropriate presentation of the aesthetic potential of the river and the waterfalls was the removal of the existing vehicular bridge (Figure 16) and its replacement with a pedestrian bridge designed to acknowledge the river and enrich the built quality of the park. The new Liberty Bridge provides an exceptional vantage point, enabling an expansive vista of the entire park and unparalleled views of the river and the waterfalls. The architecturally refined form of the structure complements the beauty of the river, while contributing substantially to the visual appeal of the park (Figure 17).

Figure 16: The demolished Camperdown vehicular bridge. (Source: City of Greenville)

Figure 17: The pedestrian Liberty Bridge over the falls. (Source: City of Greenville)

Figure 18: The Reedy River Falls, revealed

Figure 19: Public spaces around the new bridge

The *re-presentation* of a forgotten river as a multidimensional asset and its reincarnation as a vital destination within the cityscape (Figure 18, 19) serve to seamlessly integrate it into the central downtown area, psychologically negating the physical separation which could have potentially deterred public motivation and participation. In recent years, this remarkable reimaging of the river and its successful redemption have stimulated an economic revival, inviting commercial and residential uses to this renewed neighborhood, thus adding value and richness to a place of former urban blight.

4 DERIVATIVE STRATEGIES FOR ATHENS

4.1 Defining Place and creating Connections

The preceding inventory and analysis make clear that the university-downtown intercourse is the dominant determinant of Athens' evolutionary form and continued function. As evidenced by Greenville, the integration of the river into this relationship will only be possible with the development of an adequately-rewarding riverfront destination which will offer an experience comparable to that of downtown in order to attract residents and visitors. Simultaneously, physical and perceived linkages between the proposed destination and downtown must be provided or reinforced for a contiguous transition. The following measures are essential for achieving this goal:

A. Definition of Place: The intention to underscore connections between the river and the city dictates the delineation of this destination as a public space as the pragmatic and appropriate approach. A shared, communal place of interaction in which every resident feels welcome – a public commons – is essential to reinforce social identity (Childs, 2004), but currently absent in Athens. Such spaces offer possibilities to facilitate cohesion within the community and affirm spatial identity. A public plaza or urban park fronting the river would create invaluable opportunities for a range of communal activities such as concerts, exhibitions, fairs etc. It could be a platform to unite a community composed of multiple layers separated by profession, race, culture and age. The remarkably diverse population of Athens includes students (local and international), educators, retirees, government and private workers, as well as a sizable low-income demographic. These groups rarely have opportunities for interaction in social, non-business situations, leading to an undesirable situation of isolation and segregation. A common gathering space will provide opportunities for residents to encounter and establish connections with other residents with whom they may not otherwise interact, as well as providing a common ground of universal ownership. The proximity of this destination, at less than half a mile (10 minute walk) from the primary focus of College Avenue facilitates its usability (Alexander et al., 1977, p. 173). The meaning invested in this space can be amplified by establishing linkages to proximate elements of potential value such as Dudley Park by pedestrian bridges. While providing additional vantages points to experience the river, they will also reinforce notions of interconnectedness between the diverse landscape components. As evidenced at Greenville, this can be an opportunity for the introduction of architectural distinction and definitive symbology into the development process.

B. Expansion of Positive Streetscape: The viability and appeal of this space would be contingent upon a direct connection with downtown, and this can be realized by extending the favorable character of Broad Street up to the river. Transforming this interstitial link from its present fractured, unappealing and disjointed character into an extension of Broad Street would make it an asset of substantial importance to the city by expanding aspects of positive experience such as prioritization of pedestrians over automobiles, architecturally-distinguished buildings edging the street, and a visual and functional diversity of uses. This transformation will restore importance to East Broad Street, which presently fades into insignificance upon approaching the river. Its value can be further enhanced by the proposed plaza which will provide symbolic affirmation to its terminus. Serving as an appropriate culmination to the street on approaching from the west, and its origin from the east, it will accentuate this location as a gateway, reinforcing both the traveler's sense of arrival and departure, as well as the identity of the city (Alexander et al., 1977, p. 277).

4.2 Approaches to Placemaking: Student Interpretations

This thesis was applied as an academic exercise in an Urban Design course at the College of Environment and Design, University of Georgia in 2009, to highlight the complex issues confronting designers and landscape architects in the appropriate and sensitive adaptation of waterfronts. The strategy outlined above was presented to the class, which was then challenged to derive design solutions for its realization following an observational fieldtrip to Greenville. Selected examples are presented in this paper as illustrative approaches for the accomplishment of these objectives.

Figure 20: Plaza Design Proposal I

Figure 21: Plaza Design Proposal II

Figure 22: Plaza Design Proposal III

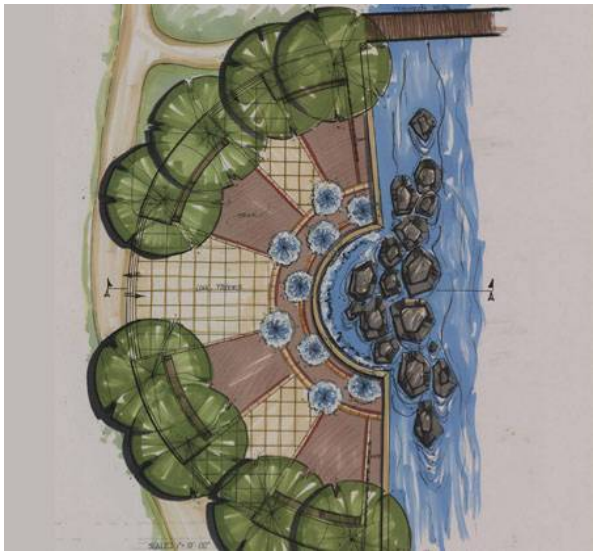

Figure 23: Detail of space focused on river

Figure 24: Proposed bridge design

Figure 25: Proposed E. Broad St. infill, plan and elevation

5 CONCLUSION

The thesis and concepts presented above constitute an introductory interpretation of a goal to accentuate experiential attributes which distinguish Athens as a desirable urban environment. Bringing the river back in focus can add another layer of interest to an environment already recognized as distinctive and valued for its emphasis on the appropriate aspects of urban living, as evidenced by its citation as one of the nation's Dozen Distinctive Destinations (National Trust for Historic Preservation, 2009). The creation of a venue intended to foster communal interchange will provide a component of vibrant urbanism absent from the contemporary morphology of Athens. A place of social cohesion and shared ownership, it will help realize relationships among residents and generate occasions for exchange and communication which currently must be accommodated in ersatz and opportunistic expropriations of public space. The definition of this space by the Oconee River will bring into sharp public focus its multidimensional identities – aesthetic, functional, historical and ecological. This process of making the Oconee 'visible' can be a stimulant for environmental conservation and diligent stewardship of a resource which is increasingly imperiled by human activity.

More importantly, however, by revealing obliterated physical and ideological connections to the Oconee River, this approach will introduce historical authenticity into a narrative which currently conveys an incomplete identity of the city. These references will enable an accurate and deeper comprehension of the cultural landscape of Athens, ameliorating the prevalent image which is a unilateral acknowledgment of the university. As a derivative advantage of the creation of a focus at this location, presently-disconnected points of historic significance can be assimilated into the larger canvas of the city and accorded deserved recognition. This weaving together of disparate, underutilized urban components, along with the establishment of the Gateway, will enrich the experience of living in and visiting the city.

Ultimately, the advantage of this approach would be the redefinition of the city's conveyed identity into a more equitable representation of its evolution. Due acknowledgement of the role of natural systems and processes in the formation of Athens can restore principles of human-nature harmony, the abandonment of which has precipitated the environmental crises which characterize global development and degrade both natural resources and quality of life. It would help to illustrate the fact that in the process of Athens' growth, the river has not remained immune to human activity and depredation – it has been transformed, physically, functionally and ecologically, and these transformations are not inconsequential. By encouraging dialog between city and river, urbanity and nature, these notions can heighten the ecological foundations of urban systems which in contemporary society are all too often forgotten.

6 BIBLIOGRAPHICAL REFERENCES

Alexander, C., Ishikawa, S., Silverstein, M., Jacobson, M., Fiksdahl-King, I. and Angel, S., 1977. A Pattern Language. Oxford University Press, New York.

Appleton, J., 1996. The Experience of Landscape. John Wiley & Sons, New York.

Arvidson, A.R., 2008. Reshaping Toronto's Waterfront. Landscape Architecture, 98, 12: 26-37.

Brown, P.H., 2009. America's Waterfront Revival: Port Authorities and Urban Redevelopment. University of Pennsylvania Press, Philadelphia.

Childs, M.C., 2004. Squares: A Public Place Design Guide for Urbanists. University of New Mexico Press, Albuquerque, NM.

Ching, F.D.K., Jarzombek, M.M., Prakash, V., 2007. A Global History of Architecture. John Wiley & Sons, Inc., Hoboken, NJ.

City of Athens, 1951. Athens, Georgia: Home of the University of Georgia 1801-1951. Athens: Author.

Clemson University, Center for Community Growth and Change, 2002. The Reedy River Master Plan. City of Greenville, Greenville, SC.

Dovey, K., 2005. Fluid City: Transforming Melbourne's Urban Waterfront. Routledge, New York.

Eckstut, S., 1986. Designing People Places. In: A. R. Fitzgerald (Editor). Waterfront Planning and Development. American Society of Civil Engineers, New York, pp. 25-27.

Evenson, N., 1966. Chandigarh. University of California Press, Berkeley.

Goodwin, R., 1988. Waterfront Revitalization for Smaller Communities. University of Washington, Seattle.

Hawkes, J., 1973. The First Great Civilizations. Alfred A. Knopf, New York.

Hough, M., 1995. Cities and Natural Processes: A Basis for Sustainability. Routledge, New York.

Huff, A.V., 1995. Greenville: The History of the City and County in South Carolina Piedmont. University of South Carolina Press, Columbia, SC.
Hull, A.L., 1906. Annals of Athens, Georgia: 1801-1901. Banner Job Office, Athens, Georgia.
Hynds, E.C., 1974. Antebellum Athens and Clarke County Georgia. University of Georgia Press, Athens, GA.
Kaika, M., 2005. City of Flows: Modernity, Nature and the City. Routledge, New York.
National Trust for Historic Preservation, 2009. Dozen Distinctive Destinations : Athens, GA. http://www.preservationnation.org/travel-and-sites/sites/southern-region/athens-ga.html, January 2010.
Nolan, J.M., 2008. A Guide to Historic Greenville, South Carolina. The History Press, Charleston, SC.
Sasaki Associates, 1999. Reedy River Corridor Vision Plan. Author, Greenville, SC.
Schama, S., 1995. Landscape and Memory. Alfred A. Knopf, New York.
Seccombe, S., 2007. Lost Waterfront: The Decline and Rebirth of Manhattan's Western Shore. Fordham University Press, Bronx, NY.
Waterfront Toronto, 2009. Our Future is Growing at the Water's Edge. Author, Toronto, Canada.

Acknowledgements:
All images (except of student work) are by the author, unless noted otherwise. The student work presented in this paper is by Sean Bright, Heather Houser and Kathryn Thompson.