

Very Special Places: The Architecture and Economics of Intervening in Historic Cities



Culture in Sustainable Development

Very Special Places: The Architecture and Economics of Intervening in Historic Cities

Ismail Serageldin

The World Bank

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Ismail Serageldin is Vice-President of Special Programs at the World Bank, Washington, D.C. The views expressed here are those of the author and should not be attributed to the World Bank Group or any of its constituent organizations.

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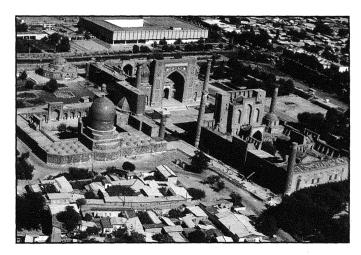
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Introduction: The Urban Dynamics of Historic Cities

The protection of our cultural heritage is an essential part of protecting a sense of identity, a sense of who we are. It underlines the present as a link from a well-defined past to a future crafted by our actions, guided—individually and collectively—by our aspirations and our innate abilities. This cultural heritage covers many things: literature, visual art, music, buildings, customs, ritual, and the objects of everyday use. This essay focuses on the built environment, specifically historic cities. By that, we mean the living historic cities, not the conservation of monuments and archaeological sites. More focus will be given to the living cities of the developing world, where the challenge of protecting the heritage is greatest.

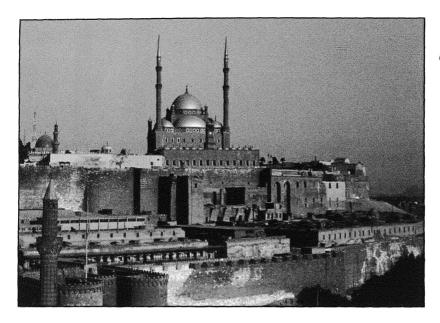
Samarkand, Damascus, Cairo, Marrakesh—to name but a few—are very special places whose names evoke magic and the stuff of dreams. Yet their realities are of cities teeming with poor individuals struggling with inadequate infrastructure and

deteriorating buildings. But the magic is certainly there, and so is the pride of the inhabitants in their city and the monuments that make it such a precious part of the world heritage. Thus intervening in these very special places requires a combination of skills and a philosophy that si-



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Registan Square, Samarkand



Cairo Citadel

multaneously honors the past, celebrates the present, and invents the future. It will require sound policy, effective participation, innovative institutional arrangements, and public–private partnerships. Above all, it will require the mobilization of considerable investments, targeted specifically to the rejuvenation of these very special places.

It is essential to be able to mobilize the investments required to conserve the cultural heritage in the cities of the developing world now! In the next thirty years, the urban populations in many parts of the developing world are going to treble.¹ This is going to put enormous pressure on cities like Cairo, Lahore, Calcutta² and Yogjakarta, all custodians of an enormously valuable built heritage. It will require new and fresh thinking about the issues of managing urban growth and creating livable cities.³

Overall urban populations in the developing world will double by 2025. See World Bank (1996).

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² Indeed the increment in the urban population in India over the next 30 years will be more than double the total population of France, Germany and the United Kingdom combined. See also Ismail Serageldin (1977, pp. 8-29).

³ See, inter alia, Cohen, Ruble, Tulchin and Garland (1996); Serageldin, Cohen and Sivaramakrishnan (1994); and Serageldin, Barrett and Martin-Brown (1995).

A critical social discourse

The rapidly urbanizing developing world faces many social challenges.⁴ Population growth, influx of rural migrants, and an evolving economic base, all challenge the ability of the cities to provide jobs and livelihoods. Crumbling infrastructure, poor and over-stretched social services, rampant real estate speculation, and weak governments all contribute to putting tremendous pressure on the central cities which are often loci of invaluable architectural and urbanistic heritage. The degradation of the urban environment limits the abilities of a growing, shifting population to establish communities with a minimum standard of decent housing. The municipal administrations are weak.⁵ The tensions within the cities fray the social fabric as much as economic speculation transforms the urban tissue. The inner historic cities are increasingly ghettoized, with the middle-class and economic activities either fleeing the historic core or actively destroying its very fabric.

Against this spiral of mounting problems, a response is possible. This positive response to the challenges of old cities is feasible, even under difficult conditions. Such a response must protect the urban context and the sense of place, revitalize the economic base of the old city, and meet the legitimate expectations of its citizens. All of that is needed for the historic city to be kept alive, rejuvenated, and its links to the surrounding modern city reinforced. This requires much more than a restoration project; it requires Herculean efforts at urban revitalization.

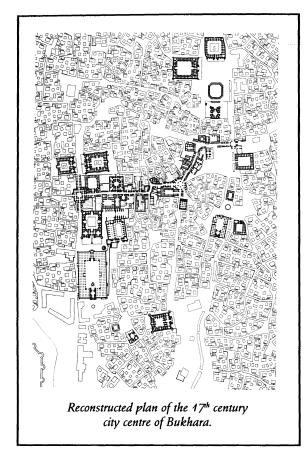
Within that context, some efforts have been innovative, creative, and successful. Such projects, many of which have been recognized internationally by various awards and publications, have each shown in an exemplary fashion one facet of the solution.⁶ The proper integration of the old city, restored and renovated, into the fabric of the new metropolis is feasible and has been successfully achieved in some places, like Bukhara in Uzbekistan.⁷ In some cases, the linking of the restoration of

⁴ This section draws on Serageldin (1995, pp. 10-15.)

⁵ Programs are in place to try to help the municipalities in the poorer countries, sometimes by twinning arrangements with cities in industrialized societies, sometimes with formal international agencies technical assistance programs.

⁶ See "A Critical Social Discourse" in Davidson (1995, pp. 22-23).

⁷ See Al-Radi (1997, pp. 54-58).



the different buildings has been achieved to make the whole more than the sum of the parts, 8 as was done in Sana'a in Yemen. 9 In rare cases it has been possible to transform the socioeconomic base, as was done in Hafsia in Tunis. 10 And there are so many more excellent projects to learn from, even if each provides a creative solution to only part of the problem.

Together, these projects enrich the international debate on the problems of rapid urbanization, historic cities, and a growing urban underclass. But these are only facets of the solution, addressing parts of the problem. What is needed is to bring these parts together in a framework

engendering the positive processes needed to create a powerful upward spiral of investments, social cohesion, and rising incomes, thus giving back an inherent vitality and unique charm to the old historic cities.¹¹

⁸ See for example the Darb Qirmiz project in Cantacuzino (1985, pp. 92-101).

⁹ See al-Asad and Serageldin (1997, pp. 48-51), also, Serageldin and Lewcock (1983, pp. 124-36).

¹⁰ See "Reconstruction of Hafsia Quarter, Tunis, Tunisia," in Davidson (1995, pp. 48-55).

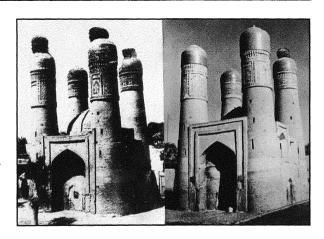
An outstanding example of a holistic approach that involved all the actors concerned in an ongoing fashion is Amsterdam. Rob Pickard (1995, p. 10) observed that "The approach in the Netherlands is one that is much more sustainable than elsewhere. By making decisions on a holistic basis, with wider community involvement, the outcome has been both socially and economically beneficial". In all such cases, the efforts include new investment and adaptive reuse of old buildings. In the case of Amsterdam, Pickard notes that because of declining Church attendance in Amsterdam, many of the religious bodies sold church buildings that they could no longer afford to maintain in their underused capacity, and these were imaginatively converted into offices, shops, information centers and even housing.

Box 1. Bukhara, Uzbekistan

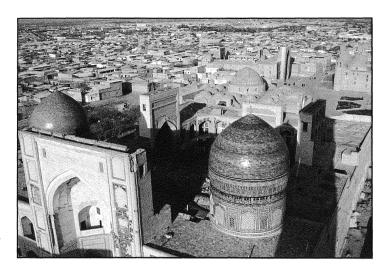
Bukhara—legendary city of learning and culture, a jewel of medieval Muslim urbanism—had fallen on hard times. The years of Soviet rule had largely engulfed it in a typical banal urban setting, and the remaining historic buildings were seen merely as monuments. Exceptionally dedicated efforts to reclaim the past heritage were beginning to bear fruit when the collapse of the Soviet Union and the emergence of an independent Uzbekistan launched another kind of dynamic. With the weakness of the economies of the new republics in an increasingly competitive international economy, the local community took over the major responsibility to reclaim the old city as its own.

Remaining elements of the old city have been sensitively integrated into the modern city fabric. The historic restoration work is of high quality, and the sense of place has been enhanced. The reuse of the historic spaces and buildings has been an economic, social, and architectural success. The surroundings have also been revitalized and have galvanized new construction sensitive in scale and materials, as well as new economic activities.

The combination of community efforts and technical expertise represented in this project deserve high praise. The sense of civic pride and enhanced cultural identity that accompany this work show that the legacy of the past can be more than a museum or a tourist destination. It can be an important part of the living present, to be used and enjoyed by residents and visitors alike, and a continuing inspiration for new architecture and urbanism.



Restoration of Bukhara Old City.

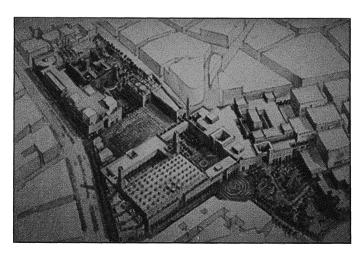


Bukhara Restoration.

Architecture and Urbanism

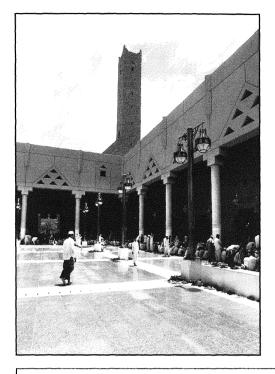
Too frequently, the question of new building in historic areas is fraught with polemics. Clearly, to insert new buildings in a historic context is one of the most difficult things an architect confronts. Yet the thought of preserving cities frozen in time, just for their quaintness, would run counter to any notion of the city as living organism. The museum city, such as Khiva, is not likely to be the historic living city that we aspire to keep alive. More relevant is the renovation of old Bukhara, which achieved a fusion of the old district in the living city.

How to build in historic areas? This goes to the very heart of what great architecture is all about.



The language of architecture is more than form and esthetics. It evokes the past, prefigures the future, and articulates the present urban re-

Drawing of the mosque (lower) and the Justice Palace (right) in the core of the Qasr al-Hokm district, Riyadh.



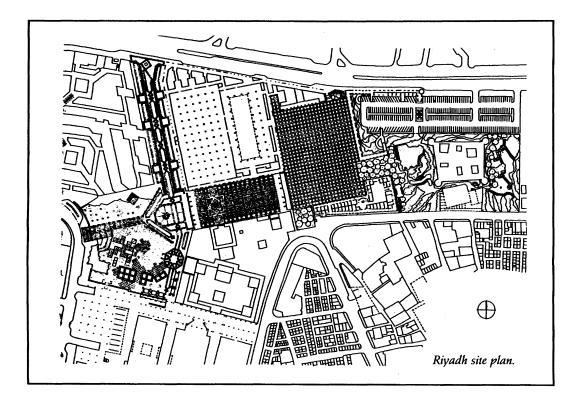
The Masjid jami' Mosque in Riyadh.

ality for all people. The language of architecture is therefore an integral part of manifesting a society's image of itself, while architects are both the custodians of a past legacy, an architectural and urbanistic heritage of forms and spaces, as well as the creators of the heritage of tomorrow.

Box 2. Riyadh, Saudi Arabia

Although Riyadh does not have a historic core such as those we associate with many of the older cities in the area, such as Cairo or Sana'a, it does have an old complex—the Qasr AlMasmak—and it does have an architectural heritage particular to the area of Najd. The effort to rejuvenate the downtown could have ignored these realities, but it did not. Architect Rasem Badran's project to rearticulate the central urban core of Riyadh, with a series of well-proportioned open spaces and built links that connect the Masjid jami' to the surroundings is an award-winning design in a difficult climatologic context requiring special attention to both human scale and the needs of a high-tech, motorized metropolis. The architect's efforts at reinterpreting the language of Najdi architecture goes beyond copying past details or the occasional echo. It is an effort to incorporate the past and reinterpret it anew. The space of the Mosque is inviting and the technological solutions are skillfully unobtrusive. It is a case of showing that history can come alive in the new, not just remain hostage to the conservation of the old.

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Architecture is the most localized of the arts. It is rooted to site. It must respond to functional realities and user needs. Yet it is more, much more. To the extent that location provides context and user needs provide the functional requirements, architecture is specific to a particular society and locale. To the extent that architecture responds to the universal and to the evolving globalization and its challenges, it must transcend the limits of the locale and provide more to the user, and the viewer, than just the functional response to felt needs. It has an emotive quality and symbolizes a state of being.

In the developing world, the crisis of identity is manifest in the choice of architectural vocabularies. These tend to either reject the contemporary and repeat the iconic forms of the past—a position charged with ideology by a type of architectural traditionalist fundamentalism—or they try to break out of the locale and import the westernized modern as an expression of "progress". Both of these approaches tend to be heavy handed and devoid of sensibility to either time or space.

What is needed, and is still all too infrequent, is an architecture that can reflect and enrich the critical discourse about the contemporary architectural language

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and expression. An architecture that reinterprets the past through contemporary eyes, and sees respect for the heritage not in the slavish copying of past form, but in the respectful incorporation of the spirit of the past in the new. An example of this is found in the efforts of Rassem Badran to reinterpret old Najdi architecture in Riyadh.

When that is done, we will have an architecture capable by the quality of its innovative solutions, not only to protect the historic district's character, but also to enhance the sense of place that it engenders. Such projects make a real contribution to the architecture of humanism, that transcends the boundaries of place.

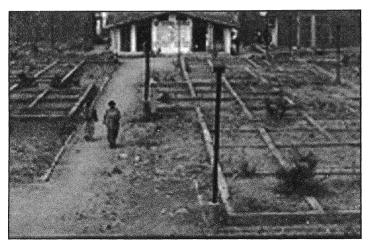
Innovative Concepts

Progress is hostage to innovation. The incremental improvements of past forms or solutions is seldom able to respond to the needs of tomorrow. Such approaches do not possess the liberating contribution of innovative concepts that open the door to rethinking the content of the challenge of the evolving world around us, and to the avenues that should be pursued to find fertile grounds to plow. Such innovations, that require breaks with the conventional, are seldom born in perfection. The innovators are risk takers, who bring a subversive creativity to challenge us all to rethink what we have long taken for granted. The risk takers must be recognized for what they do, arguably a far more important contribution than just another well-functioning building.

The developing world today, indeed the entire world, needs the creative leaps of the imagination that dare to think what remains unthinkable within the confines of the conventional wisdom, which by definition reflects the experience of the past.

CONCERN FOR THE POOR AND THE SOCIAL COHESION OF OLD CITIES

Architecture and built form is ultimately for people. We cannot ignore the enormous risks of urban displacement and the social dynamics that undergird the transformations of old neighborhoods, or the social rootlessness that accompanies homelessness and extreme urban poverty. Well-designed architectural and urban design interventions can sometimes successfully respond to these challenges. In rare cases it has been possible to transform the socio-economic base, as was done in Hafsia in Tunis, a project that is discussed at length later in this essay. Problems of



Basic infrastructure and footings for walls are beginnings of a community in Aranya.

the poor and of potential community strife were addressed in the Aranya project in Indore, India.

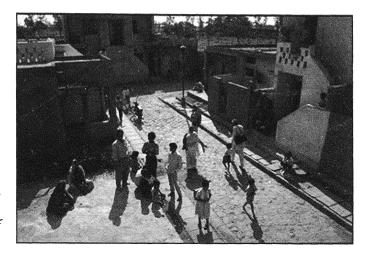
Even the intractable problems of the homeless were successfully addressed in an innovative incremental scheme in Hyderabad, Pakistan. And there are so many more excellent projects to learn from, even if each provides a creative solution to only part of the problem.

Intervening in historic cities

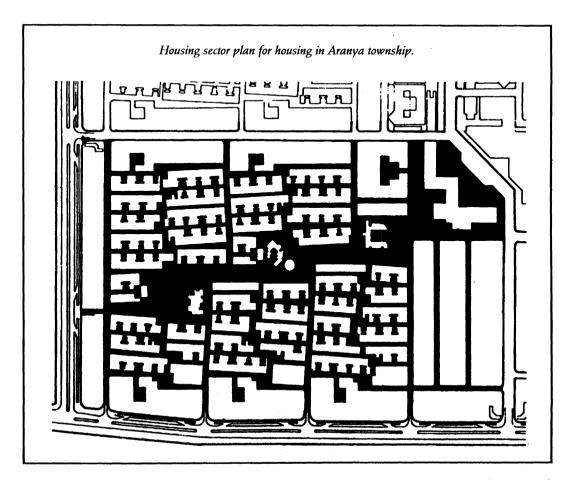
From the soaring language of architecture and form, and the compassionate language of a caring social discourse, we must come down to the prosaic world of politics and finance. Without finance there would be no projects, period! But fi-

Box 3. Aranya, Indore, India

The Aranya project in Indore, India, is a unique case of a distinguished architect intervening in support of a sites and services scheme to bring a coherent urban design and sensitive models around core service units that can be incrementally built up. By consciously reflecting the mix of Muslim, Hindu and other communities among the poor beneficiaries and arranging for shared common facilities and social spaces, the project has successfully set a path of pluralistic tolerance and cooperation. By introducing a mix of income levels it enables the project to be financially viable, an essential ingredient for replicability and sustainability.



Collaboration between neighbors and semi-public spaces around buildings help create a sense of community in Aranya.



Box 4. Incremental Housing Scheme, Hyderabad, Pakistan

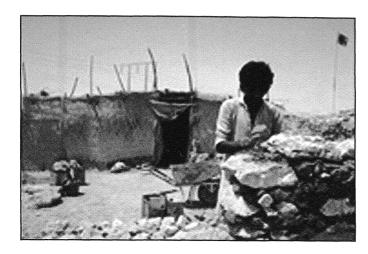
The incremental housing scheme of Hyderabad, Pakistan, successfully addresses the problem of reaching large numbers of very poor people in a replicable manner. By incorporating the poor through a sensitive participatory process, the scheme succeeds in giving them access to land tenure and assists them in incrementally establishing a home, as their means allow. The appearance of a community where once only destitute and homeless people existed is an inspiring social transformation that speaks volumes about the improvement of the urban condition even if the external appearance of the structures or the layout of the streets is certainly not an exemplary urban design.

nance and economics are dependent on a framework that brings together the different actors—public and private; international, national and local; formal and informal—in a manner that the whole is more than the sum of the parts. Such processes require not only sound finance and economics, but also effective political processes that bring all these actors together towards working collaboratively on effective approaches to conservation and socio-economic rejuvenation in historic cities.

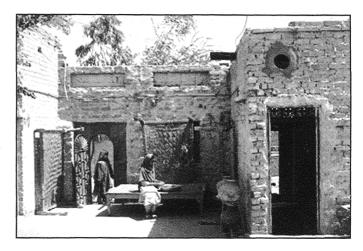
In general terms, most approaches involve some combination of the following:

- Restrictions on activities in the historic areas. The most obvious such restriction is not to destroy culturally signi-ficant structures. Restrictions may go further, however, by requiring particular standards of upkeep or specifyinghow that upkeep should be carried out (for example, by requiring particular materials that match those originally used). The activities that can be carried out in such areas are also often restricted. Such restrictions can be imposed on both public and private sector activities.
- Conservation activities on specific structures that are particularly significant.
- Measures to encourage conservation by other actors. In an urban context, direct intervention to conserve all structures is impractical. Conservation efforts, therefore, are dependent on an incentive framework that will encourage spontaneous efforts by other agents.

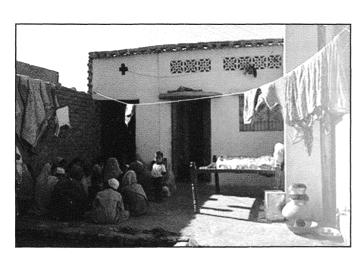
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The homeless start with very modest shelters...

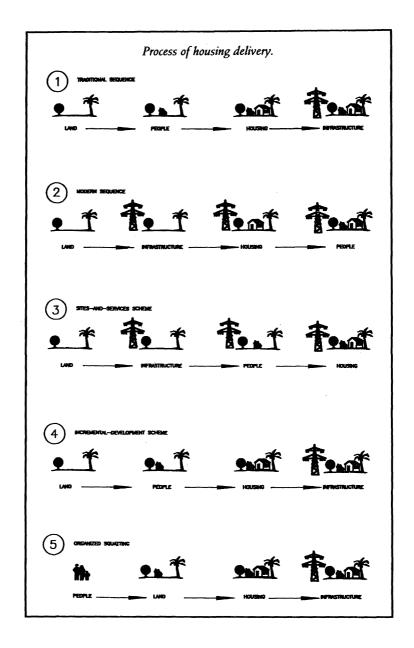


Incrementally, the shelter becomes a home...



Homes help build communities around solid families of the erstwhile homeless.

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Actors and Approaches: The Multiple Facets of the Rubik's Cube

An intricate process emerges, like the great and elegant puzzle known as Rubik's Cube where aligning the mosaic of one face tends to undo the matched colors of the other face of the cube. Trying to match sensitive architecture and urbanism, sound

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Box 5. SANA'A, YEMEN

Sana'a represents a valiant effort to cope with the preservation of the urban character of the historic urban core, not just the preservation of individual monuments. Great international interest has resulted in external financiers having an important input into the restoration of individual projects. The Yemeni authorities, with help from UNESCO and others, have been able to maintain the integrity of the entire enterprise by focusing on the whole structure of the city, repaving the roads, and encouraging citizens to rehabilitate the old gardens. Today there is a growing involvement of the local community in reclaiming its heritage. As efforts proceed, there is also a growing emphasis on the rejuvenation of the economic base of the historic city and its links with the rest of the city, which is now clearly recognized as a goal, although problems of vehicular access and solid waste management remain.

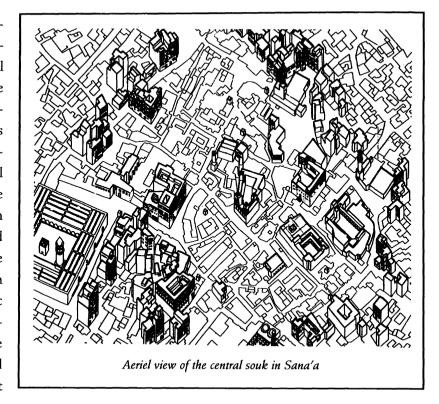
municipal finances, adequate incentives for the private sector, concern for the poor and the destitute, and community involvement and participation, while promoting socio-economic diversity and pluralism also seem impossible to resolve. However, like Rubik's Cube, the solution though quite difficult is possible. It requires patience, dedication and imagination. But it is possible.¹²

To understand better the faces of the Rubik's Cube and the path to be followed for a solution, we must start by identifying the multiple actors, the different levels of decisionmak-ing, and above all—a leitmotif that we must not lose sight of—who pays and who benefits.¹³

¹² See Serageldin (1997, pp. 5-7).

¹³ This essential principle is often overlooked in financial analysis, especially in the public finance setting. There is a long literature on the shifting and incidence of taxation that forces us to be more discriminating in understanding the real ultimate beneficiaries and those who ultimately pay. The case is all the more important in the complex designs of projects and interventions dealing with historic cities, where general revenue may be used, where public and private intertwine, and where cross-subsidies are almost invariably part of the arrangements.

The many actors include national and local governments, the international community and its agencies, both national and local tourists visiting the historic cities, both international and national private sector investing in the old historic core for commercial or real estate development, and the local resident owners and rent-



ers. Special attention must be given to the poor who risk being displaced by the unaffordability of the changes.¹⁴ In addition, the membership of the local community, for whom this is not just home, but also a fundamental part of the definition of their identity, can be the real agents of transformation when adequately mobilized and organized. This especially relates to women who are the primary agents of the networks of cooperation and reciprocity.¹⁵ Strengthening these networks is critical to strengthen social solidarity in the community.

Each of these actors has a different way of looking at the problem of rejuvenating the historic cores of living cities in the rapidly evolving context of developing

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Thoughtful practitioners of conservation have long called attention to the issue of the poor and minorities. See, for example, Williams, Kellogg and Gilbert (1983, especially Part IV, pp. 291-314).

¹⁵ For a discussion of the importance of these networks of reciprocity for the poor, see Narayan-Parker (1997). For a discussion how social capital helps the poor cope with difficulty in urban contexts, see Moser (1996). For a general discussion of the role of community action in dealing with urban problems, see, inter alia, Serageldin, Cohen and Leitmann (1995).



Panorama of Old Sana'a.

countries. They will have their own calculus by which they will decide whether to invest their effort and funds in the renewal of the historic core and the preservation of its unique character. The problem lies in the fact that the set of incentives that are necessary

for each to act in a particular way is not independent from the others. Thus the context of the fiscal and regulatory regimes that will govern economic activity and social life in the historic city must be designed to give each the necessary set of incentives. This is done in order that the whole acts in concert to reverse the negative downward spiral we described and that the whole is more than the sum of the parts and creates a positive spiral of renewal. Herein lies the analogy with the Rubik's Cube puzzle.

Trying to shore up the finances of the municipality through more rigorous taxation may discourage the necessary private investment, while excessive incentives to the private investors could bankrupt the municipality. Attracting higher income residents in the city may raise the revenues and create economic opportunities, but it could also lead to the displacement of the local population. Thus striking a balance among the needs of all is the trick required to rejuvenate the economic base of the historic cities while protecting their unique heritage and maintaining their social cohesion. This is the equivalent to solving the Rubik's Cube.

The Institutional Dimension

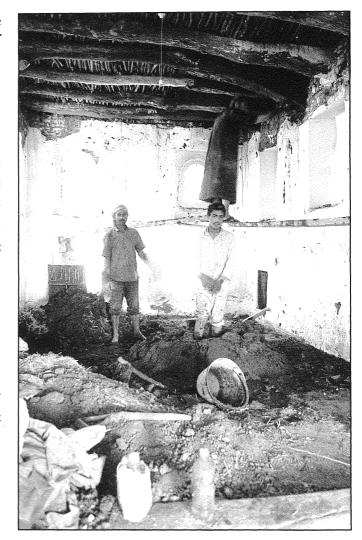
Clearly, the nature of the institutional arrangements in a particular city could help or impede the search for the elegant solutions of the urban cultural heritage Rubik's Cube. The arrangements are usually complex and bureaucratic. They involve multiple agencies and many bureaucracies but are not adequate to actually involve many of the inhabitants or to address the needs of private investors who could be key in

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Major repairs were made to historic buildings for adaptive reuse in Sana'a.

rejuvenating the economic base of the historic city.16 One of the approaches that could be explored in this context is the use of a historic district development authority. Elsewhere I have written about this aspect of the problem, but the idea is simple enough: to cut across the forests of red tape with one bold piece of legislation and to structure its decisionmaking in such a way that it provides accountable, but effective and efficient, management with a primary responsibility for all aspects of the historic area.17

One key innovation would be to recognize the rights of all



actors in a set of shares that could be allotted in proportion to the stake they have in the geographic area under consideration. This would give the government a significant position to start with since the government owns through the public spaces a significant part of the land. In this system, the market value of rented space could also be recognized in the allocation of shares to the renters.

¹⁶ See Mona Serageldin (1989, pp. 260-66).

¹⁷ See Serageldin (1994, pp. 15-32.)

How to Conserve: Adaptive Reuse and Flexibility

What, how, and why to conserve are questions that have long engaged many people of talent.¹⁸ We are not just concerned with conservation and reuse of individual buildings, though important, but we are addressing the more difficult challenge of conserving historic areas, an urban tissue as sense of place¹⁹ and an urban character.²⁰ Still, individual monuments and complexes are the key elements that articulate the space and often the landmarks that provide the touchstones of our memory and the emotive charge of the public spaces that surround them. Thus the philosophy of restoration of the whole, must take into account the restoration and conservation of the important monuments that make many of these historic cities such very special places.

Adaptive reuse is a term employed to designate interventions that allow new uses for old buildings, thus keeping them inhabited and used as part of the socioeconomic fabric of the city rather than as closed monuments. In assessing the quality of an adaptive reuse project, due weight should be given to the imaginative and successful new uses, the extent to which the reuse assimilates the original surroundings, the technical difficulty of the adaptation, and the quality of the restoration work. Old palaces have been converted into hotels, and houses into offices, cultural centers, and museums. Museums are by definition respectful of the old buildings. Some museum transformations require imaginative and difficult challenges as exemplified by the Musee d'Orsay (a former railway station) and the Musee Picasso (the former hotel Sale), both in Paris.

¹⁸ See, Williams, Kellogg, and Gilbert (1983); and Kain (1981). Kain's book covers discussions on the origins of the conservation movement and its evolution with some references to experiences in Germany, Canada, the United States, Poland, inter-war Britain, France (Paris), Austria, and Greece.

¹⁹ Dealing with such questions is always tricky, but several efforts have been made over the years to bring in some rigor to what tends to be a very qualitative set of issues. See inter alia, Morris (1983, pp. 259-87) where he tries to use various quantitative and qualitative methods to address the elusive quality of a sense of place.

²⁰ See R. Worksett (1969). In my view, urban character tends to be defined by many factors in addition to prevalent architectural style. These factors would include street alignment, variety of land use, variety of age of structures, mix of public, semi-public and private space, the volumetric and height relations of the structures, and finally the socio-economic activities of the people. For a view that ties the external appearance of buildings to urban character, see Williams, Kellogg, and Gilbert (1983, pp. 140-96).

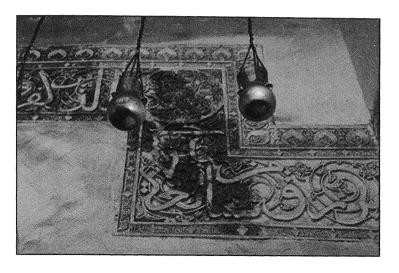
Box 6. Different philosophies for conservation

There are different approaches to conservation of monuments and historic areas. These different conservation efforts are worthy of support and recognition, but each must be judged by somewhat different criteria. Criteria in judging a restoration project include the technical difficulty, the quality of the detailing, and the adequacy and appropriateness of the methods and materials employed. Moreover, the revival of craftsmanship that the restoration work may engender is considered; and whether the restoration induces the society's awareness of its heritage is not overlooked. Three philosophies have been noted: those that carefully distinguish between the new and the old, those that restore a building to its erstwhile grandeur (while unobtrusively identifying new bricks and materials), and those that simply reconstruct a building to remind people of what it could have looked like in the past.

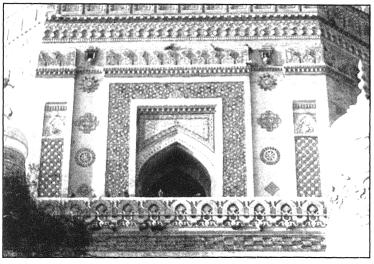
While adaptive reuse is the only way to keep an old historic district living and functioning, it requires more than attention to the physical restoration and reuse of the building. The type of use can be a source of controversy if it is not sensitive to the feelings of the community. When faced with disuse due to shifts in population density or structural dilapidation, former places of worship may be suitable for schools or cultural centers, but could be offensive if used as a nightclub.

The need to preserve has to be matched by the need to provide flexibility of reuse. Experience shows that excessively rigid adherence to restoration standards, that is where nothing is changed from the original, can lead to less than optimal use of the properties.²¹ This calls into question the need to review the prevalent practices in conservation to ensure that purity of purpose does not constrain the ability

A case from the UK is instructive: two buildings in Bath, of exactly identical appearance, one of which was totally remodeled from the inside, basically allowing a totally different layout while maintaining the facade unchanged; the second being maintained and remodeled exactly as it was both inside and outside. The former rented at 18 British pounds per square foot, the going rate, the latter remained vacant for 2-1/2 years; see Burman, Pickard, and Taylor (1995, p. 16).



Two approaches to restoration:
Externally the old and the new are clearly distinguished as in Darb Qirmiz, Cairo (top) or are indistinguishable, but are clearly labeled in unseen areas as in Multan, Pakistan.







More reconstruction than conservation at Azem Palace, Damascus, Syria.

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to reuse buildings and thus strangle the economic and social revitalization of historic city cores. ²²

Economics is the Key

Whatever we do in all the important preceding aspects, we must also be able to mobilize the necessary amount and the right kind of investment needed to revitalize the economic base of the old city, restore its glorious monuments, protect its unique character, and meet the socio-cultural needs of the inhabitants and the aspirations of the young.²³ This invariably raises a host of technical problems²⁴ and requires imagination and technical expertise including imaginative reuse of old buildings, as well as money.²⁵ This mobilization of resources will require the application of rigorous methods of economic and financial analysis that justify the flows of public investments and create the adequate incentives for private action.²⁶ Such methods are not at present systematically applied in the case of historic cities,²⁷ and the rest of this paper is devoted to (a) the discussion of the most recent thinking on the methodology of economic analysis for cultural heritage projects; and (b) some applications, specifically the cases of Hafsia, Tunis and Fez, Morocco.

²² Despite excellent work, some conservationists can be too restrictive in their interpretations of the respect for the past. They would allow no improvements in the buildings at all. In general, conservationists fall into different schools that do not necessarily have an agreed approach to restoration. See inter-alia, Serageldin and Zulficar (1989, pp. 250-53).

²³ Today, many special codes must be met, including historic codes, building codes, and zoning regulations [see, inter alia, Yatt (1998)] including, for example, the need to make buildings more usable by people with disabilities. This last has many pitfalls; see P.C. Evans Terry Associates (1998) who address the design requirements of the "Americans with Disabilities Act".

²⁴ Technical issues are very difficult to address because ways of building and materials have changed. Foulks (1997) includes some selected success stories from the United States. For the more recent historic buildings, Ramsey and Sleeper (1998) give some 2,600 details published originally between 1932-1951, which are good for most of the buildings built at the turn of the century and in the first half of the 20th century.

²⁵ See Sherban Cantacuzino (1975). See also, Williams, Kellogg, and Gilbert (1983, pp. 233-74).

²⁶ See Lichfield (1988).

²⁷ For an excellent review of both theory and practice, see Pickard (1995).

The Economics of Investing in Cultural Heritage

A full discussion of possible approaches to the problems of historic cities is outside the scope of this volume; these questions have been extensively debated elsewhere. But, as stated above, interventions invariably involve restrictions on actions as well as direct action by the public authorities and incentives to motivate other actors to intervene in beneficial ways.

A Conceptual Framework

For conservation efforts in historic cities to succeed, a multiplicity of actors needs to undertake many disparate actions. Some of these actions can be deliberately chosen and directed by government decisionmakers. Many other actions will be outside their direct control and will depend on independent decisions made by various actors in the private sector. Analysis of such efforts must include, therefore, both an economic and a financial analysis. The economic (or social) analysis asks whether the proposed investments are worth undertaking: do their benefits to society as a whole exceed their costs? The financial (or private) analysis, on the other hand, examines the specific costs and benefits that different groups will experience as result of these investments: will each group individually gain or benefit from them?²⁸

²⁸ See Lichfield (1988, pp. 201-84). For a discussion of cost-benefit analysis techniques, see inter alia, Squire and van der Tak (1975) or Ramirez (1980). For a clear informal theoretical discussion of benefit-cost analysis and a comparison to other decisionmaking frameworks, see Smith (1986, pp. 13-34). For a fairly comprehensive discussion of the theory of benefit-cost analysis and valuation methods, including case studies, see Layard and Glaister (1994). For a conceptual discussion of ethical systems and policy making, see Kneese and Schulze (1985, pp. 191-220).

Standard urban economics analysis techniques can be used to some extent. Significant solid work has been done within such a framework,²⁹ some considered excellent, as in the study of St. Petersburg by Butler, Nayyar-Stone and O'Leary (1997).³⁰ The cultural heritage nature of conservation investments in historic cities however adds a dimension that standard urban economics is ill-equipped to address. Many of the benefits of cultural heritage do not enter markets, or do so only imperfectly. The following section will discuss possible approaches to measuring such benefits, drawing insight from environmental economics which has a history of studying similar problems.³¹

Building on the Experience of Environmental Economics

Cultural heritage problems are qualitatively very similar to problems encountered in conserving environmental assets. The analysis of the costs and benefits of investing in protecting environmental assets has been at the heart of much of the environmental economics.³² Many of the services provided by environmental assets and by historic cultural heritage may not enter markets, or do so only indirectly and imperfectly. And many benefits are wholly intangible. Moreover, the nature of the benefits provided by cultural heritage sites is conceptually very similar to those provided by, for example, national parks. Whether aesthetic benefits are derived from buildings or trees and whether recreation benefits are derived from museum visits or fishing makes little difference to the valuation problem. Recent advances in the field

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²⁹ See for example, Couillaud (1997).

³⁰ See Butler, Nayyar-Stone and O'Leary (1996).

³¹ This idea has been discussed in the literature for some time. However, the first application of these ideas in a quantitative manner applied to an actual historic city preservation project in the developing world is reported in the case of Fés, Morocco. See, inter alia, Stabler (1995, pp. 33-50).

³² For an excellent overview of environmental economics, see Cropper and Oates (1992, pp. 675-740), Schramm and Warford (1989), Markandya and Richardson (1992), Munasinghe (1993), and Weiss (1994). Also, see major new texts including Economics of Natural Resources and the Environment (Pearce and Turner 1992), Environmental and Natural Resource Economics (Tietenberg 1992), World Without End (Pearce and Warford 1993), in addition numerous volumes including Blueprint for Green Economy (Pearce, Markandya and Barbier 1989), Elephants, Economics, and Ivory (Barbier, Burgess, Swanson and Pearce 1990), Sustainable Development: Economics and Environment in the Third World (Pearce, Barbier and Markandya 1990), (Valuing the Environment (Barde and Pearce 1991), and Economics for the Wilds (Swanson and Barbier 1992).

of environmental economics are thus very relevant to how a cost-benefit analysis of a project involving a cultural heritage site might be conducted.

CATEGORIES OF VALUE

Cultural heritage sites differ from other sites and from each other because of their aesthetic, historical, cultural, and social significance, precisely what makes them such very special places. Cultural heritage projects will have a wide range of effects. Some effects may or may not be directly related to the cultural heritage dimension of the site, yet others will be a mix of both.³³ In similar circumstances, environmental economists generally take a comprehensive look at value, using the concept of total economic value. Total economic value is usually decomposed into a number of categories of value. The breakdown and terminology vary slightly from analyst to analyst, but generally include the following:

- Extractive (or consumptive) use value
- Non-extractive use value and
- Non-use value.

Extractive and non-extractive are generally referred to together as "use value". Each is often further divided into additional subcategories. By disaggregating the value of a cultural heritage site into various components, the problem generally becomes far more intelligible and tractable.³⁴

Extractive use value. Extractive use value derives from goods which can be extracted from the site. In the context of a forest, extractive use value would be derived from timber and other harvests. In historic living cities, there are direct uses being made of the buildings, for living, trading, and renting or selling spaces. Many of

³³ To the extent that the sites involve natural or human-made beauty, the site may have enormous value that is independent of its historical or cultural value. Thus one can enjoy the charms of a old medieval town center without reference to the history of the individual monuments, although for many the city would evoke both memory and identity through its cultural heritage connotations.

³⁴ See Pagiola (1996).

³⁵ In some ways, the sense of place, its impact on behavior, and the ensuing interactions are also intangible benefits that cannot be easily measured but are nevertheless real. See inter alia, Serageldin (1996, pp. 17-30).

these categories of use are captured by markets and transactions in markets. Unlike a forest, the use of a historic city does not deplete it unless the use is inappropriate or excessive, denaturing the beauty of the site or the character of the place. At some level a parallel exists to extractive use of a forest being kept at sustainable levels.

Non-extractive use value. Non-extractive use value derives from the services the site provides. For example, wetlands offer filter water, improving water quality for downstream users and national parks provide opportunities for recreation. These services have value but do not require any good to be harvested. The parallel for historic cities is clear, some people just pass through the city and enjoy the scenery without spending money there, and their use of the place is not captured by an economic or financial transaction.³⁵ Measuring non-extractive use value is considerably more difficult than measuring extractive use value.

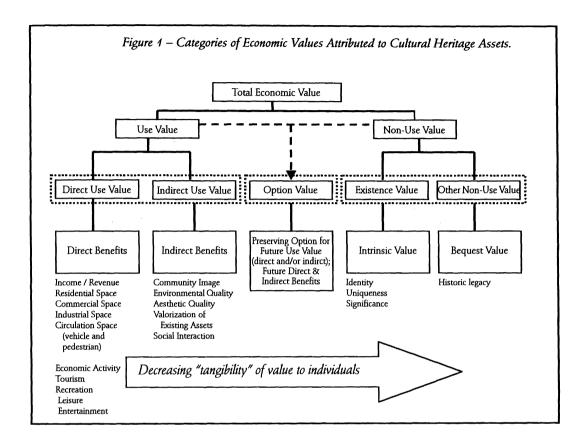
A substantial part of environmental economics has been devoted to valuing such services,³⁶ and a variety of methodologies have been developed to do so.³⁷ This category of use value is extremely relevant to many aspects of cultural heritage areas, and is a key part of the discussion that follows. Among the non-extractive use values generally considered in environmental economics, those likely to have the most relevance to the valuation of cultural heritage are aesthetic and recreational value:

- Aesthetic value. Aesthetic benefits are obtained when the fact of sensory experience is separate from material effect on the body or possessions.³⁸ Aesthetic effects differ from non-use value because they require a sensory experience, but aesthetic benefits are often closely linked to physical ones.
- Recreational value. Although the recreational benefits provided by a site are generally considered together as a single source of value, they are a result of different services which a site might provide. The extent of recreational benefits depends on the nature, quantity, and quality of these services. A historic area could have rest stops, vistas, and attractive meditation spots, in addition to shopping bazaars and, of course, monuments. The enjoyment

³⁶ This work has a long tradition, dating from the early efforts of Clawson and Knetsch (1996) to the more recent work of David Pearce. See, inter alia, Pearce (1994), Pearce and Nash (1981), and Pearce and Warford (1993, Chap.5).

³⁷ See inter alia, Freeman (1994); and Dixon, Scura, Carpenter, and Sherman (1994).

³⁸ See Graves (1991, pp. 213-26).



derived by visitors from each of these will depend on such factors as the cleanliness of the surroundings. Disaggregating the benefit into components eases the task of valuing it.

Non-use value. Non-use value tries to capture the enrichment derived from the continued existence of major parts of the world heritage.³⁹ Even if not likely to visit

³⁹ In fact, non-use value can be a very important part of the value of an environmental asset, and by extension, of cultural heritage. Lockwood and colleagues (1993, pp. 233-43) reported on a Contingent Valuation Method survey to estimate the willingness to pay for the conservation of East Gippsland national forest in Victoria, Australia; the survey highlighted the importance of existence values and bequest values which accounted for 35% and 36% of the total valuation of Victorians. In fact non-use value was three times use value. In addition, in 1993 a panel of prominent economists assembled by the National Oceanic and Atmospheric Administration (NOAA) confirmed the importance of nonuse values in environmental damage litigation and approved contingent valuation as a method for approximating the magnitude of nonuse values; see Arrow et al (1993, pp. 4602-14).

these sites, one would feel impoverished if the sites were destroyed. In many cases, this benefit is referred to as *existence value* (the value that people derive from the knowledge that the site exists, even if they never plan to visit it). People place a value on the existence of blue whales even if they have never seen one and probably never will; if blue whales became extinct, many people would feel a definite sense of loss. Other aspects of non-use value include *option value*⁴⁰ (the value obtained from maintaining the option of taking advantage of a site's use value at a later date, akin to an insurance policy), and *quasi-option value* (derived from the possibility that even though a site appears unimportant now, information received later might lead us to re-evaluate it). Non-use values are the most difficult types of value to estimate. Yet, this category of value has obvious relevance for the assessment of cultural heritage sites.

Environmental problems at the site. In addition to helping evaluate the benefits provided by the site itself, environmental economics techniques can also be useful for evaluating the impact of changes in environmental problems at the site. ⁴¹ Air and water pollution, for example, will affect the health of residents and the enjoyment of the visitors. To some extent, the benefits of actions to address these problems can be valued separately, just as they would if the site did not have cultural significance. In some cases however the impact of these problems will be intrinsically intertwined with those of the cultural heritage site. As an example, the enjoyment derived by visitors, and hence their willingness to pay for it, will be adversely affected by air pollution.

RECOGNIZING THE BENEFICIARIES

There are many different actors who are likely to benefit from an investment to protect the cultural heritage in historic cities. These include:

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⁴⁰There is a discussion of whether option value should be included with use values, since the intent of paying is to protect the possibility of future use, which arguably is different from existence values. On the other hand, since it does not involve current use, it can be legitimately included with non-use values. Pearce and Warford (1993, pp. 99-102) categorize option value as use value.

⁴¹ See, for example, the work on evaluating the effects of environmental quality on the value of properties and the use of different methodologies to measure impacts of changes in environmental conditions on the site, particularly: Willis, Garrod, Saunders and Whitby (1993, pp. 33-50). For an example relating to hazardous waste sites, see Schulze et al (1995). Alternatively, Loomis (1997, pp. 233-245), not incorporating property values, estimates per trip recreation value as a function of environmental quality.

- Residents, making the distinction between renters and owner-residents, and absentee landlords, who qualify as a special category of investors (housing usually being regulated differently form businesses).
- Investors in businesses in the historic area, who may or may not be residents, including the small traders, the national and the international private sector.
- Visitors to the historic city, some being nationals others international visitors.
- Non-visitors, distinguishing between national and international, which could be called "the world at large".

Further refinements are necessary for meaningful analysis: poor and rich, formal and informal, and so on.

MEASURING THE BENEfits

There are several methods used in measuring benefits.⁴² Each has certain advantages and limitations.

Market-price methods. Although many benefits of cultural heritage sites do not enter markets, some do.⁴³ The most obvious example is when visitors pay a fee to enter the site. The revenue from such fees provides a measure of the value people place on being able to visit the site. Some uses of cultural heritage sites have close substitutes which can be used to estimate the value of those uses. Thus the value of using a historic building as a school might be estimated using the cost of the next best way to obtain the necessary space—for example, the cost of building and equipping a suitable structure. Cultural heritage sites might also induce a variety of economic activities, again most obviously in the tourism industry (hotels, restaurants,

⁴² For a review of these techniques see Stabler (1995, pp. 33-50), and Pagiola (1996)and Serageldin and Pagiola (1998).

⁴³ The general view is that to the extent that there is a freely functioning real estate market these benefits would be captured in the urban land and real estate price. Note that in many cases there is a proxy price for the property, due to the presence of rent-controls or other legal barriers to outright sale, key money and other informal transactions can be tracked for such values. An outstanding research effort of this type is given by the Harvard work on Fés; see Harvard University GSD (1998).

shops). Standard techniques can be used to value these benefits. The difficulty generally arises in predicting the impact that changes in the cultural heritage site will have on the quantity of such services, not in estimating their value.

Replacement cost. The cost of replacing a good is often used as a proxy for its value. ⁴⁴ This approach has two problems, however. First, it simply may not be possible to replace many cultural heritage sites and where the site is only damaged, restoration cost might be used. Second, the point is to decide whether a site is worth restoring, using restoration cost as a measure of value is clearly of little use. It would argue that the more degraded the site, the costlier the restoration and the greater the value. This is clearly faulty reasoning, though this measure may be appropriate for some critical aspects of the site where the value might reasonably be thought to be extremely high. In such cases the appropriate approach is one of cost effectiveness rather than cost benefit.

Travel cost. The travel-cost method uses information on visitors' total expenditure to visit a site to derive their demand curve for the site's services. ⁴⁵ This method assumes that changes in total travel costs are equivalent to changes in admission fees. From this demand curve, the total benefit obtained by visitors can be calculated. (It is important to note that the value of the site is *not* given by the total travel cost; this information is only used to derive the demand curve.) The travel-cost method was designed for and has been used extensively to value the benefits of recreation. But it depends on numerous assumptions, many of which are problematic in the context of international tourism. It is best used to measure the value placed by visitors for the site as a whole, rather than on specific aspects of the site.

Hedonic methods. Many observed prices for goods are prices for bundles of attributes.⁴⁶ For example, property values depend on physical attributes of the dwelling (such as number and size of rooms, amenities such as plumbing, and general

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⁴⁴ See inter alia, Pearce (1993, pp. 105-11) and Winpenny (1991, pp. 48-50).

⁴⁵ See Rose (1998). For a general discussion of this method, see Freeman (1994) and Bockstael (1995, pp. 655-71). For a discussion of recent trends in travel cost, hedonic pricing, contingent valuation, and conjoint analysis, see Smith (1997). Willis and colleagues (1993, pp. 33-50) have rightly argued that the travel cost method (TCM) is best suited for measuring value only when the majority of the visitors to a site come from far away, and is thus largely inadequate for urban contexts.

⁴⁶ See S. Rosen (1974, pp. 34-55) and Rose (1998). For a general discussion of this method, see Freeman (1993, chapters 11-12).

condition); on the convenience of access to employment, shopping, and education; and on a number of less tangible factors such as environmental quality.⁴⁷ Because each house differs slightly from others, the influence of the various factors on its price can be broken down using statistical techniques known as hedonic methods, provided sufficient observations are available. This approach is of interest because many dimensions of cultural heritage are likely to be embodied in property values.⁴⁸ A historic structure, for example, may sell for more than an equivalent modern one. Hedonic methods allow this effect to be measured, holding other factors such as size and amenities constant. In essence the technique estimates the implicit prices for various attributes, that together make up the sales price. Although these techniques have obvious applicability to the study of benefits of cultural heritage in urban settings, their use has often been limited by their considerable data requirements.⁴⁹

Contingent valuation. Contingent valuation (CV) is carried out by asking consumers directly about their willingness to pay (WTP) to obtain an environmental good. 50 A detailed description of the good accompanies details on how it will be provided. In principle, contingent valuation can be used to value *any* environmental benefit. Moreover, because it is not limited to deducing preferences from available data, contingent valuation can be targeted quite accurately to ask about the specific changes in benefits that the proposed project would bring. Contingent valuation methods have long been used to examine aesthetic benefits, and is especially important in the estimation of existence value because it is the only way to measure it, since by definition existence value will not be reflected in behavior. In developing countries

⁴⁷ For an example with respect to air quality, see Brookshire, Thayer, Schulze, and d'Arge (1982, pp. 101-13)

⁴⁸ The quality of the surroundings have been known to impact the prices of residential property, and thus by extension, the quality of a historic district can be a factor. Garrod and Willis (1991, p. 715-28) for example calculated the impact on residential prices of proximity to forest using a hedonic price method.

⁴⁹ Efforts to include non-market factors resulted in a number of efforts to develop a scoring system to value buildings of historic value or to prioritize action by government. Canada's method of ranking based on a scoring system is reported on by Kalmann (1980). The United States has also developed similar ranking system, and the United Kingdom has used a "Planning Balance Sheet Analysis" form (which was used in the case of Convent Garden to evaluate two alternative schemes in the 1970s). All of these were reviewed by Pickard (1995, pp. 14-17).

⁵⁰ For a general discussion of this method, see Bjornstad and Kahn (1996), and Jakobsson and Dragun (1996). Also, see Rose (1998).

contingent valuation has been used primarily to value publicly or privately provided goods such as water supply and sewerage in areas without existing services. Contingent valuation methods have been the subject of severe criticism by some analysts.⁵¹ But best-practice guidelines have now been developed for its use,⁵² and it is now generally accepted that contingent valuation can provide useful and reliable information as long as these guidelines are followed. A pioneering example of the application of contingent to cultural heritage conservation is presented below, in the discussion of the case of Fez.

Choice experiment. Choice experiment is a type of conjoint analysis. Conjoint analysis is a class of survey valuation techniques where respondents compare different bundles of attributes; other types of conjoint analysis include trade-off adjustment, ranking, and pair-wise ratings. In choice experiments, respondents are presented with a series of well-defined choice sets (typically three choices to a set) and are asked to choose the most appealing consumption bundle from each choice set. Consumption bundles have varying attributes, one of which can be price. Choices are repeated with many attribute levels and combinations. From these choices, the researcher can identify (1) the attributes which significantly influence choice, (2) an implied ranking of attributes, (3) the marginal WTP for a change in an attribute, and (4) the implied WTP for a plan which changes more than one attribute.⁵³ Choice experiment results are directly comparable to some forms of the contingent valuation and travel cost methods. While effective at capturing the individual attribute values of a project, the total project value calculation is dubious. In addition, design decisions, such as attribute choice, are issues. Finally, the application of this method to nonuse value estimation is relatively new and untested and, like contingent valuation, choice experiment results can not be verified.

Benefits transfer. Benefits transfer refers to the use of estimates obtained (by whatever method) in one context to estimate values in a different context. For example, an

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⁵¹ For a survey of the many criticisms that can be leveled at the contingent valuation studies, see inter alia, Garrod and Willis (1990, pp. 33-50).

⁵² The NOAA panel set guidelines and burden-of-proof standards for producing "legitimate" contingent valuation results; see Arrow, Solow, Portney, Leamer, Radner and Schuman (1993, pp. 4602-14). Critical assessments of how the Arrow et al criteria have faired can be found in Randall (1997) and Smith (1997). Also, see Rose (1998).

⁵³ See Hanley et al (1998, pp. 1-15) in the Journal of Agricultural Economics, Smith (1997), and Rose (1998).

estimate of the benefit obtained by tourists viewing wildlife in one park might be used to estimate the benefit obtained from viewing wildlife in a different park.⁵⁴ This approach must be used with considerable caution, however, because the commodity or service being valued must be greatly similar at both sites, as must the affected populations. Because cultural heritage sites are unique, benefits transfer methods have little applicability. Yet there may be some relevance in considering benefits associated with international tourism. Since tourists at a historic site are likely to be drawn from the same pool of potential tourists as those at another site, it seems reasonable to assume they would place similar values on similar services. Thus, while this approach is probably of little use in valuing unique aspects of the site, it could be used for more generalized aspects. Of course, the original estimates being transferred must be reliable for any attempt at transfer to be meaningful.

Pitfalls in Measuring Benefits

The choice of technique depends on the problem being studied. Except in simple situations, a variety of techniques will likely be necessary to estimate the full range of benefits. Moreover, where substantial investments are contemplated, it might be desirable to cross-check estimates by deriving them from multiple methods. When bringing together the results of multiple techniques, two important points should be borne in mind: to avoid the twin dangers of *underestimation* (not measuring intangible benefits) and of *double counting* (using techniques that each capture part of the same benefit and adding them).⁵⁵

Another important pitfall comes from limiting the benefit stream to a fairly measurable, solid and understandable set: tourism revenues. Indeed, a benefit stream that focuses exclusively on tourist revenue not only misses the intrinsic value of the heritage, but the imbedded logic of this analysis could lead to three erroneous conclusions:

⁵⁴ Alberine et al (1997, pp. 107-26) transfer US-mean WTP to avoid air pollution-induced health effects to Taiwan and compare results with CV findings obtained in Taiwan. Bergland et al (1995) evaluated and found unsatsifactory benefit transfer approaches as applied to two Norwegian river sites. Hanley et al (1998)in the Journal of Agricultural Economics discuss some advantages and disadvantages of benefits transfer with contingent valuation and choice experiment valuation techniques.

⁵⁵ See Serageldin and Pagiola (1998).

- That those areas of the cultural heritage where one could not generate a sufficiently large tourist stream are not worth the investment. This is a denial of the intrinsic worth of the cultural heritage, both for the local people and the world at large who are enriched by its very existence even if they never visit the site. After all, one may never have an opportunity to visit any World Heritage sites, but they would feel impoverished at the loss of such sites.
- That maximization of tourist numbers and their expenditure at a site would be desirable, since it increases the benefit stream. In fact, often such a development would destroy the charm of the place and denature the activities that are endogenous to the cultural setting.⁵⁶
- That if another and mutually exclusive investment—say a casino on the beach—resulted in increased tourist dollars for the country, we should leave the old city without restoration and build the casino.

Clearly, all these conclusions are neither justified nor defensible. We must look for the intrinsic value of the cultural heritage above and beyond what it is likely to generate in terms of tourist dollars.

Another potential pitfall is the use of the likely impact of investment in (or expenditure on) restoring the heritage on the gross domestic product (GDP). This approach equates the spending with the benefit of that spending. Thus letting a monument decay and then spending more on its restoration and conservation would appear to promote more benefits than avoiding the decaying of the building in the first place. These anomalies are common to GDP calculations, and have been much debated in the economic literature.⁵⁷ Although some aspects of the issues can be

⁵⁶ This is also known as a problem of carrying capacity. Englin and Mendelsohn (1991, pp. 275-90) have studied this aspect in terms of congestion in visiting parks. They found that certain dirt roads on forest parks had attractive attributes that below certain saturation levels of utilization are considered an economic good, but beyond which they are seen as negative by users. This article discusses diminishing marginal utility, not congestion. Michael and Reiling (1997, pp. 166-73) illustrate the importance of hetergeneous preferences for congestion in determining recreation area benefits.

⁵⁷ For a discussion of the technical pitfalls and issues of using GDP/GNP calculations, see Krishnan, Harris and Goodwin (1995, Part V). Efforts to adapt National Accounts to deal with Environmental dimensions have been promising but limited. See Lutz (1993).

addressed by such calculations—for example that spending on restoration projects has a higher multiplier effect than spending on other construction projects—they are likely to be misleading despite their obvious attractiveness to decisionmakers who have been conditioned to think in terms of contributions to GDP growth as equivalent to increases in welfare and well-being.⁵⁸

⁵⁸ The limitations of the GNP/GDP concept have been well captured by Robert F. Kennedy in his 1968 observation cited in Steer and Lutz (1994, p. 17): "The Gross National Product does not allow for the health of our children, the quality of their education, or the joy of their play. It does not include the beauty of our poetry or the strength of our marriages; the intelligence of our public debate or the integrity of our public officials. It measures neither our wit nor our courage; neither our wisdom nor our learning; neither our compassion nor our devotion to our country; it measures everything, in short, except that which makes life worthwhile."

Application of Methods in Hafsia and Fez

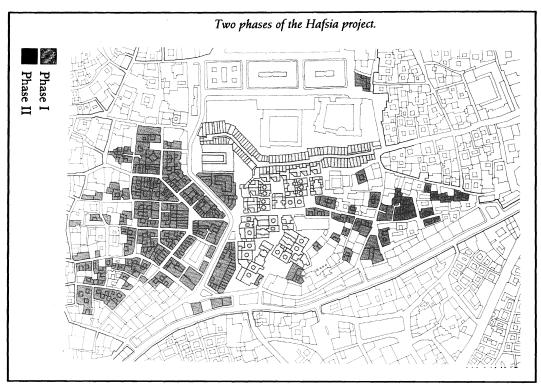
The above economic valuation methods that hold such so far have not been widely applied. Two cases come to mind as examples of recent efforts in that direction: an analysis of the public intervention in the Hafsia district of old Tunis, and preparation of the project to revitalize Old Fez. The first is an ex-post study of a completed experience; the second, an ex-ante analysis that bears study, since it pioneers many aspects of the problems discussed here.

Revitalization of Hafsia in Tunis

This award winning project represents an exemplary success in revitalizing the economic base and diversifying the social mix of the inhabitants of the old medina, the



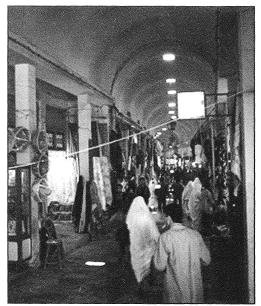
Overview of Hafsia Quarter II.



The carved souk in Hafsia is a thriving commercial artery.

traditional town center. The middle class has returned, making the old medina once more the locus of social and economic integration that it historically had been.⁵⁹

This project received widespread recognition in 1983 when it won the Aga Khan Award for Architecture⁶⁰ because of its ability to contain the



⁵⁹ See Davidson with Serageldin (1995, pp. 44-55).

⁶⁰ See Cantacuzino (1985, pp. 82-91).

Using the traditional vocabulary in new buildings maintains the character.

damage of earlier misguided efforts at largescale development in the area. This was accomplished by encircling the three apartment buildings and the two schools, and creating the covered souk that organically relinks the two parts of the old city



texture, and sensitively inserting some scaled housing that emulates the texture. The key questions raised at the time were whether a second phase would be able to do more than just promote a physical implant of a few new houses. The response over the past 10 years has been spectacular. The second phase has not only confounded the skeptics with its success, it also won the unique distinction of a second Aga Khan Award for Architecture in 1995.61

In an amazing amalgam of public and private, the Municipality of Tunis, the Association pour la Sauvegarde de la Medina (ASM) and the Agence de Réhabilitation et Rénovation Urbaine (ARRU) have succeeded in reducing the high population densities in the old wekalas, dealing with the displaced through a sensitive resettlement scheme. Rehabilitation of the structures through credit schemes have worked extremely well in all but the rent-controlled, non-owner occupied structures. The success of the project in 1995 in nudging the government to finally remove the rent-

⁶¹ See Davidson with Serageldin (1995, pp. 44-55).

Table 1. Project Financial Summary for Hafsia Revitalization All figures in millions of US dollars

Upgrading component

opquating component	••		
Expenses Infrastructure	1.2	REVENUES Repayment of home and	1.1
community facilities	1.2	improvement loans	1.1
Home improvement		Profit sharing	
loans	1.1	on land sales	1.2
Resettlement of		Repayment on	
displaced households	4.0	resettlement loans	1.9
displaced flouseffolds	4.0	resetuement ioans	1.9
Sub-total	6.3		4.2
Rehabilitation compo	NENT		
Land acquisition	1.4	Land sales to	
,		private developers	1.5
Construction	4.8	ARRU sales of	
		housing and shops	7.8
Sub-total	6.2		9.3

Note. From the perspective of the municipality and the parastatal implementing agency, ARRU. *Source.* Harvard University GSD (1994).

control law effectively lifted the remaining obstacle to commercially financed rehabilitation of these non-owner occupied rental units. 62

The second phase of the project, Hafsia II, is a financial, economic and institutional success. Cross-subsidies have made the project as a whole financially viable. Rates of return on public investment have been high. The multiplier effect of private to public funds has been of the order of three to one.⁶³ All of this has been accom-

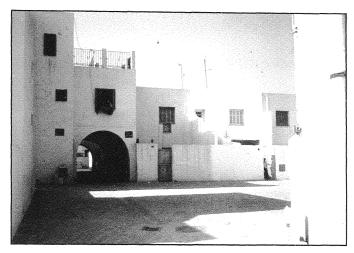
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⁶² Harvard University GSD (1994).

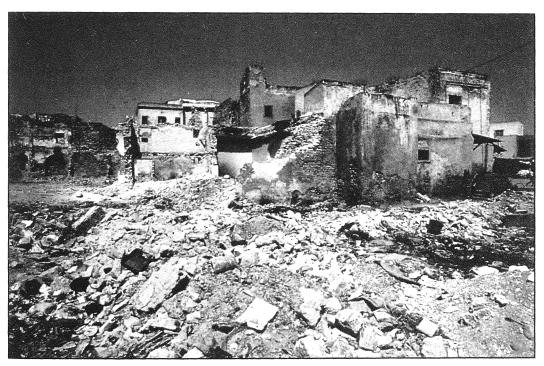
⁶³ Harvard University GSD (1994).

panied by a sensitive treatment of the urban texture, and an integration of the old city with its surrounding metropolis. It is a project worthy of study and emulation.64

The results of the ex-post financial analysis of revitalization efforts at Hafsia are



Hafsia Quarter II.



Dilapidated and demolished buildings in Hafsia, before project.

64 Serageldin (1986).

summarized in table 1. As can be seen, the overall project was financially profitable, thanks largely to the revenue generated from land sales and despite relatively high resettlement costs. The internal rate of return was found (ex post) to be about 11 percent.⁶⁵

Rehabilitating Fez in Morocco:

Few cities have been as extensively studied as Fez. The most recent set of studies was completed in 1998 by many actors, involving the Unit for Housing and Urbanization in Harvard University's Graduate School of Design, United Nations Educational, Scientific, and Cultural Organization (UNESCO), Agence pour la Dédensification et la Réhabilitation de la Médina de Fés (ADER-FES), and the World Bank. Of particular note are the exemplary environmental impact assessment, the mapping of the socio-economic data, and the analysis of the urban market transactions, all of which yield fascinating insights into the dynamics of the urban situation in the old city. In addition, the study by Carson, Mitchell, Conaway and Navrud (1997) is the first application of contingent valuation techniques to a cultural heritage conservation project.

The project for the rehabilitation of the old medina of Fez shows how a carefully designed operation can weave the different strands discussed in this essay. The project is the most comprehensive effort to date to deal with the problems of a dense medina on the World Heritage List. Whether this project will be successfully implemented will depend on many things, not least of which is the institutional arrangements chosen to implement it. But the project has already yielded an enormous amount of sophisticated analysis that should be a benchmark for future projects of this kind.

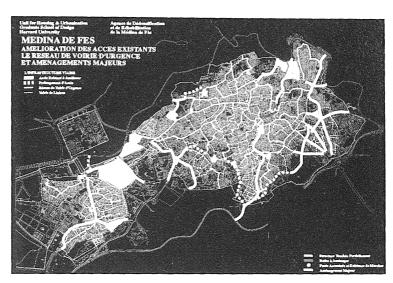
Briefly stated, the project will improve the infrastructure of the old medina, including better access for some parts of the area as well as an emergency road network (tight at 1.7 meters, but still passable with special vehicles); assist owners and residents to upgrade the dilapidated housing stock; and provide incentives for

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⁶⁵ Harvard University GSD (1994).

⁶⁶ See Harvard University GSD (1998).

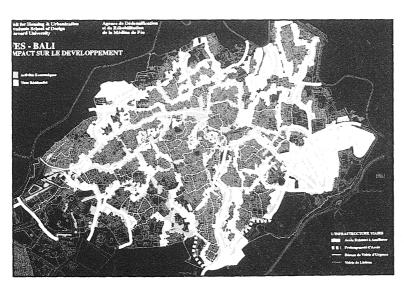
commercial activities, as well as enhanced tourist visits. The project is conceived as a public-private partnership and designed in a participatory fashion with ADER-FES playing an important role in grounding the operation in the community. External consultants from the Unit of Housing and Urbanization in Harvard



Proposed improvements in infrastructure in Fez.

University have focused as much on innovative capacity building as on rigorous analysis.

The benefits of the project include improved infrastructure, especially the emergency road network; improved living conditions, including incentives for upgrading substantial parts of the residential housing stock; restored facets of a jewel of the world urban heritage; rejuvenated commercial activities in the old medina; and increased tourism revenues. The rate of return for the pubic investment appears to be quite robust (against downside scenarios of cost overruns of the order of 10 to 20



percent) remaining consistently over 10 percent after the eighth year.

Expected positive rehabilitation impacts.

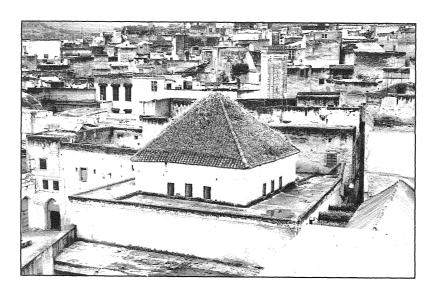


Busy commercial street in Fez.

In addition, a special study was undertaken to try to capture the added value of the historic heritage. Three methods were used, in addition to the conventional estimation of added tourist revenues resulting from longer stays or increased spending per tourist, each asked a sample of persons to respond to questions to estimate the value they place on the cultural heritage of Fez:

- The first sample was of tourists who had visited Fez, and an estimate of how much they would be willing to invest to upgrade the old town yielded the figure of some \$11 million.
- The second sample involved tourists in Morocco who had not visited Fez, and the estimate from that yielded some \$33 million (because the total number of tourists

was larger, even if the per person willingness to pay was lower). This could be called an option value for the heritage of Fez, because the interviewees could presumably visit there some day.

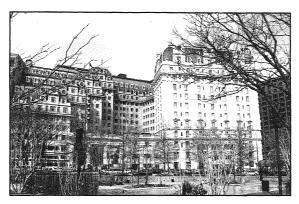


View of Fez.

• The third sample involved a Delphi approach with Europeans who had never visited Morocco and who were not necessarily likely to visit in the near future. The estimates, when generalized to other European households, yield a non-use value for the existence of the heritage in Fez at more than \$300 million. The purpose of such numbers is not that they would be translated

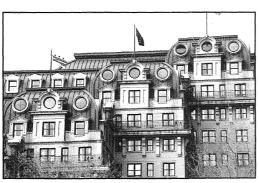
Box 7. The Willard Hotel, Washington, D.C.

The Willard Hotel in Washington, D.C. represents a very successful effort at architectural conservation and addition. The historic hotel, whose lobby was such an important meeting place in the 19th century that it introduced the term "lobby-



The Willard Complex

ing" in our vocabulary, has been restored in all its splendor. However, to make the renovation project pay, the developers had to build a new addition of commercial offices and shops. This was very elegantly done, echoing but not copying the architectural motifs, and cascading downwards from the roof line of the original. With a more muted color tone and a gentle setback around a court-



The roof details: an echo but not a copy.

yard, the Willard addition contributes to the success of the whole complex. The new not only blends with the old, but actually enhances it. It is one of those rare cases where the whole is indeed more than the sum of its parts.

immediately into some added revenue for the maintenance and restoration of the Fez heritage, but that there is a large intrinsic value that goes beyond what is actually measured by or measurable by actual tourist revenues.

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Concluding Remarks

Much is being done to add rigor in the financial and economic analysis of cultural heritage conservation projects. What is important in this new work however is that it contextualizes the project intervention—its costs and benefits—into the reality of the multiplicity of interests and actors who make up the living city. Above all, this work tries to give due recognition to the intrinsic existence value of cultural heritage, not just as an object for tourists.

The estimation of such "existence" values is not a senseless academic exercise. It is an effort to grapple with and ultimately define the intrinsic worth of protecting the cultural heritage. It is similar to work that has been done in environmental economics to estimate the existence value of biodiversity. In that case, analytical work patiently conducted over a number of years led to the recognition of the global benefits associated with the local costs of protecting the environmental asset, say biodiversity in a rain forest. This was the foundation for creating the Global Environment Facility (GEF)⁶⁷ which has provided more than \$3 billion of grants to poor countries to cover the incremental cost of protecting the global environment.⁶⁸

Surely, the parallel with the cultural heritage of the world, especially that which is recognized as part of the World Heritage List, is striking. Conservation of the

⁶⁷ The GEF provides grants to developing countries to cover the incremental cost of interventions that benefit the global environment where the local costs exceed the local benefits. It thus provides direct payment for the global benefit part of the intervention. The GEF covers biodiversity, climate change, Ozone, and international waters.

⁶⁸ About one billion dollars went for biodiversity projects.

cultural built-heritage needs to be seen in a fashion similar to the way we recognize conservation of the natural environment. Here too the costs of the conservation are local but the benefits are global. Perhaps we can hope to see a "Global Cultural Facility", that garners far more funds than are currently provided to the World Heritage Fund which receive a mere fraction of what is needed to address the major challenges of conservation that we face around the world. Even private financing of cultural heritage projects may be within the realm of possibility given recent demand revealing elicitation innovations by contingent valuation practitioners.⁶⁹

Ultimately, however, it is the amazing character and sense of cultural richness that historic cities convey that motivates us all to intervene to protect these living treasures of humanity, these very special places.

⁶⁹ The innovation referred to is a provision point mechanism with a money-back guarantee. See Rose et alf(1997) for and application to funding a renewable energy project, and Spencer, Swallow, and Miller (1998, pp.28-42) for an application to funding a water quality monitoring program. See review by Rose (1998) on contingent valuation for a discussion of provision point mechanisms with respect to other con-

tingent valuation elicitation types.

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References

al-Asad, Mohamad and Ismail Serageldin. 1997. "Conservation of Old Sana'a, Sana'a, Yemen," in Ismail Serageldin, ed. *The Architecture of Empowerment: People, Shelter and Livable Cities*. London: Academy Editions.

Alberini, Anna, Maureen Cropper, Tsu-Tsu Fu, Alan Krupnick, Jin-Tan Liu, Daigee Shaw, and Winston Harrington. 1997. "Valuing Health Effects of Air Pollution in Developing Countries: The Case of Taiwan." *Journal of Environmental Economics and Management* 34:107-26.

Alberts, Heidi J. 1996. "Modeling Ecological Constraints on Tropical Forest Management: Spatial Interdependence, Irreversibility, and Uncertainty." *Journal of Environmental Economics and Management* 30.

Al-Radi, Selma. 1997. "Restoration of Old Bukhara, Bukhara, Uzbekistan." In Ismail Serageldin, ed. *The Architecture of Empowerment: People, Shelter and Livable Cities*. London: Academy Editions.

Arrow, Kenneth, Robert Solow, Paul P. Portney, Edward E. Leamer, Roy Radner, and Howard Schuman. 1993. "Report of the National Oceanic and Atmospheric Administration Panel on Contingent Valuation." *Federal Register* 58(10).

Barbier, Edward B., Joanne C. Burgess, Timothy M. Swanson, and David W. Pearce. 1990. *Elephants, Economics, and Ivory*. London: Earthscan.

Barde, Jean-Phillipe, and David W. Pearce, eds. 1991. Valuing the Environment: Six Case Studies. London: Earthscan.

Bergland, Olivar, Kristin Magnussen, and Ståle Navrud. 1995. "Benefits Transfer: Testing for Accuracy and Reliability." Discussion Paper 95-03. Agricultural University of Norway, Department of Economics.

Beron, Kurt J., J.C. Murdoch, Mark A. Thayer, and Wim P.M. Vijverberg. 1997. "An Analysis of the Housing Market Before and After the 1989 Loma Prieta Earthquake." *Land Economics* 73(1).

Bjornstad, David J., and James R. Kahn, eds. 1996. *The Contingent Valuation of Environmental Resources: Methodological Issues and Research Needs*. New Horizons in Environmental Economics Series. Cheltenham, UK: Edward Elgar.

Bockstael, N. E. 1995. "Travel Cost Models." In D.W. Bromley, ed. *The Handbook of Environmental Economics*. Cambridge, MA: Blackwell.

Boyle, Kevin, Gregory L. Poe, and John Bergstrom. 1992. "Benefits Transfer Studies: Myths, Pragmatism and Idealism." *Water Resources Research* 28:657-63.

Brookshire, David S., Mark A. Thayer, William D. Schulze, and Ralph C. d'Arge. 1982. "Valuing Public Goods: A Comparison of Survey and Hedonic Approaches." *American Economic Review* 72 (Mar.).

Burman, Peter, Rob Pickard, and Sue Taylor, eds. 1995. *The Economics of Architectural Conservation*. Based on the proceedings of a consultation at King's Manor, 13-14 February 1995. University of York, UK: Institute of Advanced Architectural Studies.

Butler, Stephen R., Ritu Nayyar-Stone and Sheila O'Leary. 1996. "The Law and Economics of Historic Preservation in St. Petersburg, Russia." Paper prepared for the US Agency for International Development. Urban Land Institute, Washington, D.C.

Cantacuzino, Sherban. 1985. "Darb Qirmiz Quarter." Architecture in Continuity: Building in the Islamic World Today. The Aga Khan Award for Architecture. New York: Aperture.

-----. 1975. New Uses for Old Buildings. London: Architectural Press.

Carson, Richard T., Robert C. Mitchell, Michael B. Conaway, and Ståle Navrud. 1997. "Non-Moroccan Values for Rehabilitating the Fez Medina." Paper prepared for the World Bank on the Fez Cultural Heritage Rehabilitation Project. Harvard University Graduate School of Design, Cambridge, Mass.

Clawson, Marion, and Jack L. Knetsch. 1966. *The Economics of Outdoor Recreation*. Baltimore, Md.: Johns Hopkins University Press.

Cohen, Michael A., Blair A. Ruble, Joseph S. Tulchin, and Alison M. Garland, eds. 1966. Preparing for the Urban Future: Global Pressures and Local Forces. Washington, D.C.: Woodrow Wilson Center Press and Baltimore, Md.: Johns Hopkins University Press.

Couillaud, Michel. 1997. "Valorisation du Patrimoine de Fés —Rapport Final," Fés: ADER-Fés.

Cropper, Maureen L., and W. E. Oates. 1992. "Environmental Economics: A Survey." *Journal of Economic Literature* XXX, June.

. . 50

Davidson, Cynthia C. 1995. "Introduction: Architecture beyond Region." In Cynthia C. Davidson with Ismail Serageldin, eds. Architecture beyond Architecture: Creativity and Social Transformations in Islamic Cultures: The 1995 Aga Khan Award for Architecture. London: Academy Editions.

Davidson, Cynthia C. with Ismail Serageldin, eds. 1995. "Reconstruction of Hafsia Quarter II, Tunis, Tunisia." Architecture beyond Architecture: Creativity and Social Transformations in Islamic Cultures: The 1995 Aga Khan Award for Architecture. London: Academy Editions.

Desvouges, William H., Michael C. Naughton, and George R. Parsons. 1992. "Benefit Transfer: Conceptual Problems in Estimating Water Quality Benefits from Existing Studies." Water Resources Research 28:675-83.

Dixon, John, Louise Fallon Scura, Richard A. Carpenter, and Paul B. Sherman. 1994. Economic Analysis of Environmental Impacts. London: Earthscan Publications.

Englin, Jeffrey, and Robert Mendelsohn. 1991. "A Hedonic Travel Cost Analysis for Valuation of Multiple Components of Site Quality: The Recreational Value of Forest Management." Journal of Environmental Economics and Management 21:275-90.

Fisher, Anthony C., and W. Michael Hanemann. 1987. "Quais Option Value: Some Misconceptions Dispelled." *Journal of Environmental Economics and Management* 14.

Foulks, William G., ed. 1997. *Historic Building Facades: The Manual for Maintenance and Rehabilitation.* New York Landmarks Conservancy, Technical Preservation Services Center. New York: John Wiley & Sons.

Freeman, A.M. III. 1994. *The Measurement of Environmental and Resource Values*. Resources for the Future, Washington, D.C..

Garrod, Guy, and Ken Willis. 1990. "Contingent Valuation Techniques: A Review of Their Unbiasedness, Efficiency and Consistency." Countryside Change Unit Working Paper No. 10. Cited in Michael Stabler, 1995, "Research in Progress on the Economic and Social Value of Conservation," in Peter Burman, Rob Pickard, and Sue Taylor, eds. *The Economics of Architectural Conservation*. University of York, UK: Institute of Advanced Architectural Studies.

——. 1991. "The Environmental Economic Impact of Woodland: A Two-Stage Hedonic Price Model of the Amenity Value of Forestry in Britain." *Applied Economics* 24:715-28.

Graves, P. E. 1991. "Aesthetics." In John B. Braden, and Charles D. Kolstad, eds. *Measuring the Demand for Environmental Quality. Contributions to Economic Analysis* No. 198. Amsterdam; New York: North-Holland.

Hanley, Nick, Douglas MacMillian, Robert E. Wright, Craig Bullock, Ian Simpson, Dave Parsisson, and Bob Crabtree. 1998. "Contingent Valuation versus Choice Experiments: Estimating the Benefits of Environmentally Sensitive Areas in Scotland." *Journal of Agricultural Economics* 49(1):1-15.

Hanley, Nick, Robert E. Wright, and Wiktor Adamowicz. 1998. "Using Choice Experiments to Value the Environment: Design Issues, Current Experience and Future Prospects." Environmental and Resource Economics 11(3-4).

Harvard University, GSD (Graduate School of Design). 1994. "Study of the Social and Economic Impact of the Hafsia Project." Project summary prepared by Harvard University Graduate School of Design and Agence de Réhabilitation et de Rénovation Urbaine. Cambridge, Mass.

———. 1998. "Rehabilitation of the Fez Medina: Project Summary Document." In collaboration with the World Bank, Government of Morocco, Agence pour la Dédensification et la Réhabilitation de la Médina de Fès (ADER-Fés). Cambridge, Mass.

Jakobsson, Kristin M., and Andrew K. Dragun. 1996. Contingent Valuation and Endangered Species: Methodological Issues and Applications. New Horizons in Environmental Economics Series. Cheltenham, UK: Edward Elgar.

Kain, Roger, ed. 1981. Planning for Conservation. New York: St. Martin's Press.

Kalmann, Harold. 1980. *The Evaluation of Historic Buildings*. Ottawa, Canada: Ministry of the Environment.

Kneese, Allen V., and William D. Schulze. 1985. "Ethics and Environmental Economics." In Allen V. Kneese, and J. L. Sweeney, eds. *Handbook of Natural Resource and Energy Economics*, Volume 1. New York: Elsevier Science.

Krishnan, Rajaram, Jonathan M. Harris, and Neva R. Goodwin, eds. 1995. A Survey of Ecological Economics. Washington, D.C.: Island Press.

Layard, Richard, and Stephen Glaister, eds. 1994. *Cost-Benefit Analysis*, 2nd edition. Cambridge, UK: Cambridge University Press.

Lichfield, Nathaniel. 1988. *Economics in Urban Conservation*. Cambridge, UK: Cambridge University Press.

Lockwood, Michael, John B. Loomis, and Terry Delacy. 1993. "A Contingent Valuation Survey and Benefit-Cost Analysis of Forest Preservation in East Gippsland, Australia." *Journal of Environmental Management* 38:233-43.

Loomis, John B. 1997. "Panel Estimators to Combine Revealed and Stated Preference Dichotomous Choice Data." *Journal of Agricultural and Resource Economics* 22(2).

Lutz, Ernst, ed. 1993. *Toward Improved Accounting for the Environment*. An UNSTAT-World Bank Symposium. Washington, D.C.: World Bank.

Markandya, Anil, and Julie Richardson, eds. 1992. Environmental Economics: A Reader, New York: St. Martin's Press.

. .52

Michael, J. A., and S. D. Reiling. 1997. "The Role of Expectations and Heterogeneous Preferences for Congestion in the Valuation of Recreation Benefits." *Agricultural and Resource Economics Review*, October 1997.

Morris, Colin. 1983. "Townscape Images: A Study in Meaning." In Roger Kain, ed. *Planning for Conservation*. New York: St. Martin's Press.

Moser, Caroline O. N. 1996. Confronting Crisis: A Comparative Study of Household Responses to Poverty and Vulnerability in Four Poor Urban Communities. ESD Studies and Monographs Series 8. Environmentally Sustainable Development Network. Washington, D.C.: World Bank.

Munasinghe, Mohan. 1993. Environmental Economics and Sustainable Development. Washington, D.C.: World Bank.

Narayan-Parker, Deepa, and Lant Pritchett. 1997. *Cents and Sociability: Household Income and Social Capital in Rural Tanzania*. Social Development and Development Research Group, Poverty and Human Resources. Washington, D.C.: World Bank.

P. C. Evans Terry Associates. 1998. Avoiding the 100 Most Common ADA Design Errors. New York: John Wiley and Sons.

Pagiola, Stefano. 1996. "Economic Analysis of Investments in Cultural Heritage: Insights from Environmental Economics." The World Bank, Washington, D.C.

Pearce, David W. 1993. *Economic Values and the Natural World*. London: Earthscan Publications.

——. 1994. Project and Policy Appraisal: Integrating Economics and Environment. Paris: OECD. Pearce, David W., Anil Markandya, and Edward B. Barbier. 1989. Blueprint for a Green Economy. London: Earthscan Publications.

——. 1990. Sustainable Development: Economics and Environment in the Third World. Aldershot, UK: Edward Elgar.

Pearce, David W., and C. A. Nash. 1981. The Social Appraisal of Projects. London: Macmillan. Pearce, David W., and Kerry Turner. 1990. Economics of Natural Resources and the Environment. Baltimore, Md.: Johns Hopkins University Press.

Pearce, David W., and Jeremy Warford. 1993. World without End: Economics, Environment and Sustainable Development. New York: Oxford University Press.

Pickard, Rob. 1995. "Setting the Scene: A Review of Current Thinking." In Peter Burman, Rob Pickard, and Sue Taylor, eds. *The Economics of Architectural Conservation*. Based on the Proceedings of a Consultation at King's Manor, 13-14 February, 1995. University of York, UK: Institute of Advanced Architectural Studies.

Ramirez, Luis. 1980. "Benefit-Cost Analysis Methodologies: Untangling their Equivalencies and Discrepancies." Discussion Paper Series 39. Center for Latin American Development Studies, Boston University.

Ramsey, Charles, and Harold R. Sleeper. 1998. *Traditional Details for Building Restoration, Renovation and Rehabilitation*. New York: John Wiley & Sons.

Randall, Alan. 1997. "The NOAA Panel Report: A New Beginning or the End of an Era?" American Journal of Agricultural Economics 79(5) 1489:94.

Rose, Steven K. 1998. "Non-Market Valuation Techniques for Application to the Preservation of Cultural Heritage: State of the Art." Department of Agricultural, Resource, and Managerial Economics, Cornell University, Ithaca, NY.

Rose, Steven K., J. Clark, G. L. Poe, D. Rondeau, and W. D. Schulze. 1997. "The Private Provision of Public Goods: Tests of a Provision Point Mechanism for Funding Green Power Programs." Environmental and Resource Economics Working Paper Series, ERE 97-02, Department of Agricultural, Resource, and Managerial Economics, Cornell University, Ithaca, NY.

Rosen, Sherwin. 1974. "Hedonic Prices and Implicit Markets: Product Differentiation in Pure Competition." *Journal of Political Economy* 82(1):34-55.

Schramm, Gunter, and Jeremy J. Warford, eds. 1989. *Environmental Management and Economic Development*. Baltimore: Johns Hopkins University Press.

Schulze, W.D. et al. 1995. "An Evaluation of Public Preferences for Superfund Site Cleanup." Paper presented at the Annual Meeting of the American Economic Association, January 7, 1995, Washington, D.C..

Serageldin, Ismail. 1986. "Financing the Adaptive Reuse of Culturally Significant Areas." In Yudhishthir Raj Isar, ed. *The Challenge to Our Cultural Heritage: Why Preserve the Past?* Washington, D.C.: Smithsonian Institution Press, and Paris: UNESCO.

- ——. 1989. Space for Freedom: The Search for Architectural Excellence in Muslim Societies. The Aga Khan Award for Architecture. London, U.K.: Butterworth Architecture.
- ——. 1994. "Revitalizing Historic Cities: Towards a Public-Private Partnership." In Ismail Serageldin and June Taboroff, eds. *Culture and Development in Africa*. ESD Proceedings Series 1. Environmentally and Socially Sustainable Development Network. Washington, D.C.: World Bank.
- ——. 1995. "Watering the Garden." In Cynthia C. Davidson and Ismail Serageldin, eds. Architecture beyond Architecture: Creativity and Social Transformations in Islamic Cultures: The 1995 Aga Khan Award for Architecture. London: Academy Editions.

———. 1996. "Architecture and Behaviour: The Built Environment of Muslims." In Suha Özkan, ed. Faith and the Built Environment: Architecture and Behaviour in Islamic Cultures. Lausanne, Switzerland: Architecture & Comportment.

——. 1997. "Solving the Rubik's Cube: Cultural Heritage in Cities of the Developing World." *Urban Age* 4(4):5-7.

Serageldin, Ismail, ed. 1997. The Architecture of Empowerment: People, Shelter and Livable Cities. London: Academy Editions.

Serageldin, Ismail, Michael A. Cohen, and Josef Leitmann, eds. 1995. *Enabling Sustainable Community Development*. ESD Proceedings Series 8. Environmentally and Socially Sustainable Development Network. Washington, D.C.: World Bank.

Serageldin, Ismail, Michael A. Cohen, and K.C. Sivaramakrishnan, eds. 1994. *The Human Face of the Urban Environment*. ESD Proceedings Series 6. Environmentally and Socially Sustainable Development Network. Washington. D.C.: World Bank.

Serageldin, Ismail, Richard Barrett, and Joan Martin-Brown, eds. 1995. *The Business of Sustainable Cities: Public-Private Partnerships for Creative Technical and Institutional Solutions*. Washington, D.C.: World Bank.

Serageldin, Ismail, and Ronald Lewcock. 1983. "Conservation of the Old City of Sana'a." In Margaret Bentley, ed. Adaptive Reuse: Integrating Traditional Areas into the Modern Urban Fabric: Designing in Islamic Cultures. Proceedings of the third seminar in a series offered by the Continuing Education Program of the M.I.T. Laboratory of Architecture and Planning and the Harvard Graduate School of Design in collaboration with the Aga Khan Program for Islamic Architecture at Harvard University and the Massachusetts Institute of Technology, August 16-20, 1982. Cambridge, Mass.

Serageldin, Ismail, and Said Zulficar. 1989. "A Living Legacy." In Ismail Serageldin, ed., Space for Freedom: The Search for Architectural Excellence in Muslim Societies. London: Butterworth Architecture.

Serageldin, Ismail, and Stefano Pagiola. 1998. "Investments in Cultural Heritage: Preserving Historic Cities in Developing Countries." Culture and Development Anchor, World Bank, Washington, D.C.

Serageldin, Mona. 1989. "Planning and Institutional Mechanisms." In Ismail Serageldin, Space for Freedom: The Search for Architectural Excellence in Muslim Societies. London: Butterworth Architecture.

Smith, V. Kerry. 1986. "A Conceptual Overview of the Foundations of Benefit-Cost Analysis." In Judith D. Bentkover, Vincent T. Covello, and Jeryl Mumpower, eds., *Benefits Assessment: The State of the Art.* Dordrecht, Holland: Kluwer Academic Publishers.

———. 1997. "Pricing What is Priceless: A Status Report on Non-Market Valuation of Environmental Resources." In Henk Folmer, and Thomas Tietenberg, eds., *The International Yearbook of Environmental and Resource Economics.* Williston, Vt.: American International Distribution.

Spencer, M. A., S. K. Swallow, and C. J. Miller. 1998. "Valuing Water Quality Monitoring: A Contingent Valuation Experiment Involving Hypothetical and Real Payments." *Agricultural and Resource Economics Review*.

Squire, Lyn, and Herman van der Tak. 1975. *Economic Analysis of Projects*. Baltimore, Md.: Johns Hopkins University Press.

Stabler, Michael. 1995. "Research in Progress on the Economic and Social Value of Conservation." In Peter Burman, Rob Pickard, and Sue Taylor, eds., *The Economics of Architectural Conservation*. Based on the proceedings of a consultation at the King's Manor, 13-14 February 1995. University of York, UK: Institute of Advanced Architectural Studies.

Steer, Andrew, and Ernst Lutz. 1994. "Measuring Environmentally Sustainable Development." In Ismail Serageldin, and Andrew Steer, eds., *Making Development Sustainable: From Concepts to Action.* ESD Occasional Paper Series 2. Environmentally and Socially Sustainable Development Network. Washington, D.C.: World Bank.

Swanson, Timothy M., and Edward B. Barbier, eds. 1992. *Economics for the Wilds: Wildlife, Wildlands, Diversity and Development*. London: Earthscan Publications Limited.

Tietenberg, Thomas H.. 1992. *Environmental and Natural Resource Economics*, 3rd edition. New York: HarperCollins.

Weiss, John. 1994. *The Economics of Project Appraisal and the Environment*. Brookfield, Vt.: Edward Elgar.

Williams, Jr., Norman, Edmund H. Kellogg, and Frank B. Gilbert, eds. 1983. *Readings in Historic Preservation: Why! What! How!* New Brunswick, NJ: Center for Urban Policy Research.

Willis, Ken, Guy Garrod, Christopher T. Saunders, and Martin Whitby. 1993. "Assessing Methodologies to Value the Benefits of Environmentally Sensitive Areas." Countryside change Unit Working Paper 39. Cited in Stabler, Michael, 1995, "Research in Progress on the Economic and Social Value of Conservation" in Peter Burman, Rob Pickard, and Sue Taylor, eds., *The Economics of Architectural Conservation*, based on the proceedings of a consultation at King's Manor, 13-14 February 1995, University of York, UK: Institute of Advanced Architectural Studies.

Winpenny, James T. 1991. Values for the Environment. London: Her Majesty's Stationery Office.

. . 56

Worksett, Roy. 1969. The Character of Towns: An Approach to Conservation. London: The Architectural Press.

World Bank. 1996. *Livable Cities for the 21st Century*. Directions in Development series. World Bank, Washington, D.C..

Yatt, Barry D. 1998. Cracking the Codes: An Architect's Guide to Building Regulations. New York: John Wiley & Sons.

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. .58



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