Local environments in a global context

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Introduction

In this paper, I synthesize some of the major points of approximately 40 of my publications that, more directly than others, in one way or another, deal with the topic I was asked to address – the implications of globalization for the future of local physical environments. This synthesis is used to suggest a way of thinking about this problem. The emphasis is thus on a general approach, not on specific recommendations. In addition, these publications provide a reading list with much relevant material that cannot be repeated here. Also, taken together they provide a large number of references (mostly not repeated here).

However, before I address the topic, I need to specify how I use that rather vague concept of "physical environment."

The "physical environment"

At the most basic and fundamental (and also most abstract) level the environment can be understood as the organization of space, time, meaning, and communication. This can be dismantled further into systems of settings within which systems of activities take place – i.e. how settings are organized in space and time, and the linkages, proximities and separations among them, the rules that apply in the settings, and whether the cues communicating these rules are appropriate or inappropriate. This allows one to pose and attempt to answer the question: Who does what, where, when, including/excluding whom (and why) (RAPOPORT, 1990b, 1990d, 2003, 2004)? These two conceptualizations result in cultural landscapes (to be discussed below) and these, in turn, are made up fixed features (buildings, bridges, settlements); semi-fixed features (the "furnishings" of the above in the broadest sense, i.e. all the components of material culture). It is essential to consider these latter which, together with the inhabitants, animals and vehicles (the non-fixed features), acting through all sensory modalities produce the specific character or *ambience*, which is a major attribute of physical environments. As a result, the same fixed-features can result in very different sensory environments, the *local character* of locales. These people readily feel and experience but, they are difficult to describe in the absence of adequate descriptive languages (RAPOPORT, 1992b, pp. 276-280).

In this paper I refer to all four conceptualizations, but emphasize the *cultural landscape* (RAPOPORT, 1992c).

We all live in cultural landscapes because the whole world (including apparent wilderness areas) have been altered, to some extent, by human action. Recent research clearly shows very early anthropogenic change to what appear to be pristine ("primeval") landscapes. The concept of cultural landscape also links "natural" and urban landscapes which differ partly in the extent of their apparent transformation, and partly in the materials involved. Since materials in general have meaning, different human reactions to "natural" and built landscapes (e.g. "townscape") may be due to the materials involved, but all can be treated as cultural landscapes. These different reactions may also be due to the "shapes" involved: "Natural" landscapes are irregular and fractal as opposed to the regularity of (especially) contemporary townscapes, although traditional vernacular landscapes may be different (with implications for the character of local landscapes).

It needs to be emphasized that all design professions (architecture, urban design, and landscape architecture) are concerned with different components and aspects of the cultural landscape.

Cultural landscapes are defined as the result of human actions on the 'primeval' landscape over long periods of time. They include all elements of the landscape – buildings, roads, settlements, fences, infrastructure, fields, vegetation, water-features and forests, and their "furnishings." They differ primarily in the apparent extent of their transformation. If one considers design as any human change to the face of the earth, then the whole earth is designed. Since there is no "designer" in the common use of the term, a critical question is how such landscapes come to be, "hang together" and become recognizable, i.e. acquire a specific character or ambience – the multisensory attributes which characterize them (mentioned above).

The brief answer to the question posed above is that in creating cultural landscapes, many people over long periods of time make decisions, choosing among alternatives by applying systems of rules – what I call the choice model of design (RAPOPORT, 2003, 2004, figs. 28-33). These rules try to approach, however imperfectly (asymptotically) some ideal, an often nonconscious image of ideal people living ideal lives in ideal settings (RAPOPORT, 1992c). These ideals and schemata are in the minds of individuals but are shared — they are the property of cultural groups and differ among them. The remaining question then is how these produce cultural landscapes, i.e., how schemata and images are translated into action (with which I do not deal here).

The fact that cultural landscapes are not "designed" suggests that,

in one sense, most parts of most cities will continue to be "local."

The extent to which cultural landscapes cohere varies with the degree of sharing of images and schemata. This, in turn, depends on the size and degree of homogeneity/heterogeneity of groups (RAPOPORT, 2003, 2004, fig. 47). This helps explain the apparent 'harmony' of traditional vernacular landscapes with the apparent 'chaos' (really a different order (RAPOPORT, 1984, 1993), of contemporary cultural landscapes. These result from the co-action of many varied groups with often distinctive, contrasting and even conflicting visions and ideals, a wide range of available images and rapidly changing schemata. The result is complex and confusing, but dynamic landscapes characteristic of modern (especially rapidly changing) cities that may be difficult to interpret (RAPOPORT, 1992c, pp. 40-41).

The problem with "global" and "local"

There are two major types of difficulties with the general issue of global vs. local as it is generally posed.

- The first is **substantive** and I cannot deal with it here for two reasons:
  - The term globalization describes a complex and dynamic, and possibly unpredictable process regarding specifics. As a result it is likely to exhibit different patterns in different locations (e.g. very underdeveloped countries, cities vs. remote rural areas, more developed locales, groups with different "cognitive distance" from modernity). There are also likely to be different forms of syncretism/synthesis using different elements of both the core and peripheries (RAPOPORT, 1983a), as discussed later. In this connection developing countries, where conditions are more 'extreme' provide good model systems. This also applies to spontaneous settlements, which are the contemporary environment closest to traditional vernacular (RAPOPORT, 1988a). Recent immigrants (rural to cities or among countries) are another useful model system. In any case, much knowledge and research is needed.
  - This also applies to **local** circumstances. One needs in-depth knowledge of the local group and its culture, i.e. social and family structures, activity systems, lifestyles, values, belief systems, ideals, etc. It appears that the relevant groups are rather small and hence numerous (RAPOPORT, 2000a, 2000c, 2003, 2004). Since these define 'local' there can be, and usually are, many local environments and much specific research regarding any locale is needed. To give just one example, Laotian Hmong and lowland Laotians in a single locale (Milwaukee) have very different social and family structures, religious traditions, etc. and therefore needed very different housing and neighborhood environments (DEARBORN, 2004).
- The second difficulty is **conceptual**. This I address in what follows to develop an approach, which makes possible to tackle the substantive issues. I emphasize a way of thinking about the issues, of approaching the problem, which is *generally* applicable, i.e. can be used in many different specific situations and can, after appropriate research, lead to substantive answers.

The major conceptual problem is that, as is often the case, the issue is posed too generally and abstractly and, at that level, it is impossible to deal with "global" and "local" (or with "globalization"). This is also the case with other terms such as "environment," "vernacular," "culture," "ambience," etc. One needs to make such terms "operational" and, as I always advocate, this is best done through dismantling, as we have seen for "physical environment" above (RAPOPORT, 1988a, 1990e, 1992b, pp. 276-280, 2000a, 2003, 2004, figs. 43-45). This dismantling or articulation needs to be done in a way that is sufficiently general to be broadly applicable. This is particularly a potential difficulty with "local" since, almost by definition, it refers to a vast number of specific locales.

Analyzing the problem

I begin by considering what the terms "global" and "local" seem to imply, because clearly a great deal depends on what is meant by them (and by "globalization").

In its most general usage the implicit meaning of **"global"** is that it refers to being modern, contemporary, technologically advanced, providing increased choice, leading to rising expectations and hence to changing ("higher') standards, often via images in the media (RAPOPORT, 1995d (1973)). All these are implicitly taken to refer to the attributes of developed, mainly Western countries, so that "globalization" then refers to a process of change tending towards these sets of attributes.

Since **"local"** applies to specific circumstances and contexts, which are numerous, one needs a concept, which both contrasts with the above but is generally applicable. "Local" is then best conceptualized as *traditional*. In any given locale there are traditional social and family structures, activity systems, lifestyles, belief systems, values, norms etc. (all the aspects of culture). There are traditional organizations of space, time, meaning and communication, cultural landscapes, systems of settings and ambience resulting not only from fixed features but also from semi-fixed and non-fixed features. These are, or were, the starting local context from which modernization proceeds.

Of course, "tradition" and "traditional" themselves need to be dismantled, often by contrast to modern and contemporary, and I will turn to that shortly.[1] Before I do that, it should be emphasized that the effects (or consequences) of globalization in the sense of modernization are much broader than those on the physical environment (in fact the physical environment is rarely discussed). Globalization refers primarily to economics and trade, but also concerns technology, transportation, work, language, festivals, art, leisure, food, clothing, music, films and T.V. and so on.[2]

Given this, one needs to ask whether any (or all) of those have any impact on the cultural landscape. If they do, these impacts may be *direct* or *indirect*.

The fact that communications and money transfers are instantaneous and global does not *directly* influence the cultural landscape. It does, however, mean that a great variety of images is widely available among which one can choose. The results include classical columns, Mexican and American houses in Indonesia, the popularity of English half-timbered houses in Bangkok, and Victorian houses in Tokyo, and of "suburban" houses everywhere (RAPOPORT, 1990b, 2000a, 2003, 2004). The result is a "blurring" of cultural landscapes, which then tend to vary (i.e. change) over time rather than over space, i.e. by location, as in traditional situations.

The global economy further means that development spreads, and since goods are produced for a variety of places there is a tendency for them to begin to look alike (although, as we will see later, this may be changing). This is compounded by the *meaning* many of these elements have, for example as symbols of modernity, development, achievement etc. (as we shall see below). The fact that the factories and office buildings of this global economy also resemble each other leads to further blurring of distinctions among cultural landscapes. Similar effects result from the reliance on cars and hence highways, gas stations, parking lots and the like. Similar results follow from semi-fixed elements (advertising signs, billboards, traffic signs and lights, etc.) and non-fixed features (for example, the way people dress, cars and buses, etc.).

It thus seems that economic and other forms of globalization do have (sometimes indirect) effects on cultural landscapes, which tend to lose their specific local identity or ambience.[3]

But let me turn to a more detailed dismantling of tradition/traditional (i.e. local) and, by contrast, modern/contemporary (i.e. global).

Both "tradition" and "traditional" are also extremely vague

Table 1
Attributes of traditionality

NATURE OF GROUPS

A. Non-Western
Non-European
Indigenous
Pre-Contact
Pre-Colonial
Grass-Roots
Vernacular

B. Small Scale
Relatively isolated (physically and/ or socially)
Strong links to place
High local autonomy (vs "center")
No orientation to state or other large entities
Rely on social conventions
Informal social institutions
Informal controls
Tight constraints
Strong constraints
Little individual choice
Little individual selection (much "pre-selection")
Accepting things generally (comfort, well being, status, rewards, technology etc.)
Rule bound (especially old rules)
Unquestioned rules
Social sanctions
Collective control
Collective sharing
Strong kinship
Ascriptive status
Consensual
Normative (strong norms)
Obligatory
Strongly shared schemata, values, beliefs, models etc.
Unified world view
Customary
Accepting religious and familial authority

C. Preliterate (hence oral)
Non-literate
Working by example
Depending on socialization and enculturation

D. Group oriented
Strong group identity
Non-individualistic
Little individual freedom
Anonymous
Little individual motivation
Egalitarian-
Affectivity
Consensus
Communality
Strong social bonding
Homogenous
Few constituent parts
Constituent parts highly coincident
Membership and boundaries of group very persistent and coincident
Accepting hierarchy
Low conflict

E. Pervasive religiousity
Ritualistic (ritual important)
Magical beliefs
Strongly "symbolic"
Sacred relationship to the land

F. Rationality non primary
Non rationalistic
Unquestioning
Non-critical
Emphasis on accumulated wisdom and experience
Non empirical science
Non reflective
Self-evident
"Natural" way of doing things
Things as given

TEMPORAL

Old
Of the past
Accepting the past
Respecting the past
The past "substantively present"
Non modern
Contrasting with modernity
Past orientation
Non future-orientation

CONTINUITY

Emphasizing continuity
Providing continuity
Feeling connected with the past
Linking past and present
Linked across generations
Conservative
Persistent
Recurrent
Repetitive
Constant action
Respect for past patterns
Reproducing past patterns
Guided by past patterns
Habitual
Received models
Replacing particular things, not patterns or models.

CHANGE

Slow change
Slow growth (population, economy etc.)
Enduring
Long lasting
Low novelty
Slow obsolescence
Constancy (vs. change)
No deliberate or continuous search for improvement
Static ideals
Stable
Non-innovative
Accommodating change conservatively
Little variability
Gradual modification

ECONOMY/ TECHNOLOGY

Preindustrial
Limited material resources
Conservative/prudent use of resources
Not "economically rational"
Emphasis on "non-productive activities"
Not market oriented
Land seen in terms of social relations
Non hedonistic
Non consumerist
Accepting of resource, reward "income" etc., distribution
Non-technological
Slow technological growth
Diffuse knowledge and skills
Dispersed modes of production
Low specialization (in work, activities, behavior etc.)
Low differentiation

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terms used loosely and broadly, and in many not always similar ways. Also, they apply much more generally then just to the built environment. It, therefore, becomes necessary to identify the attributes of traditionality through dismantling by doing a content analysis of the relevant literature. The major categories that emerged concerned the nature of groups, temporal aspects, continuity, change and economy and technology. Then 123 specific attributes were identified (RAPOPORT, 1989) (table 1).

Others obviously exist, or might receive greater emphasis. For example it seems that greatly increased (and increasing) choice is opposed to tradition which, basically, does not raise questions about alternatives – there is a single, accepted, self-evident way of doing things.

In order to identify the relevance of these attributes to the physical environment, they were related to the 17 process characteristics and 20 product characteristics of built environments, which help define "primitive," traditional vernacular and other, more recent and contemporary environments (RAPOPORT, 1990e) (table 2).

Since then a 21st product characteristic has been added — changes in the levels of meaning (RAPOPORT, 1990c; cf. RAPOPORT, 1988b, 1990b, epilogue).

That made possible a discussion of the nature of traditionality of both product and process although, as will be seen later, product characteristics are of more, and direct, interest. It has, in fact, been suggested (Sordinas cited in RAPOPORT, 1990e) that process as such is of little interest because unlikely to be used. It does, however, help distinguish between traditional and con-

Table 2
Process and product characteristics of built environments

PROCESS CHARACTERISTICS	PRODUCT CHARACTERISTICS	
1. Identity of designers	1. Degree of cultural and place-specificity.	14. Complexity due to variations over time (changes *to* model not *of* model [as in *process* characteristics No. 15]).
2. Intention and purposes of designers.	2. Specific model, plan forms, morphology, shapes, transitions, (e.g., inside/outside, interface, entrances), etc.	15. Open-endedness regarding activities: types, numbers, overlaps, multiple uses, etc.
3. Degree of anonymity of designers.	3. Nature of relationships among elements and the nature of underlying rules.	16. Degree of multisensory qualities of environment (large range of non-visual qualities).
4. Reliance on a model with variations.	4. Presence of specific formal qualities: complexity, solid-void relations, fenestration, massing and volumes, articulation, level changes and how handled, the nature, complexity and articulation of urban spaces and degree of variations in their use of light and shade, use of vegetation, etc.	17. Degree of differentiation of settings -- number, types, specialization, etc.
5. Presence of a single model or many models.		18. Effectiveness of environment as a setting for lifestyle and activity systems (including their latent aspects) and other aspects of culture.
6. Extent of sharing of model.		19. Ability of settings to communicate effectively to users.
7. Nature of schemata underlying the model.		20. Relative importance of fixed-feature vs. semi-fixed feature elements.
8. Consistency of use of a single (same) model for different parts of the house-settlement system.	5. Use of specific materials, textures, colors, etc.	
9. Type of relationships among models used in different types of environments.	6. Nature of relation to landscape, site, geomorphology, etc.	
10. Specifics of choice model of design.	7. Effectiveness of response to climate.	
11. Congruence of choice model and its choice criteria with shared ideals of users.	8. Efficiency in use of resources.	
12. Degree of congruence and nature of the relation between environment and culture/lifestyle.	9. Complexity at large scale due to place specificity.	
13. Use of implicit/unwritten vs. explicit/legalistic design criteria.	10. Complexity at other scales due to use of a single model with variations.	
14. Degree of self-consciousness/unselfconscious of the design process.	11. Clarity, legibility and comprehensibilty of the environment due to the order expressed by the model used.	
15. Degree of constancy/invariance vs. change/originality (and speed of change over time) of the basic model.	12. Open-endedness allowing additive, subtractive and other changes.	
16. Form of temporal change.	13. Presence of "stable equilibrium" (vs. the "unstable equilibrium" of high style).	
17. Extent of sharing of knowledge about design and construction.		

temporary environments in terms of what I have called "sectionism" vs. "instructionism" with major implications for (and a need for research in) design. Considering process characteristics also leads to the identification of the importance of *rules* in the shaping of cultural landscapes and their role in the choice model of design (RAPOPORT, 1992c, 2003, 2004). Also, once the significant product characteristics have been identified (which may still be directly relevant) one can ask what process resulted in the particular product characteristics and whether this can still provide any (indirect) lessons, e.g., about how to design rule systems rather than landscapes.[4]

This analysis makes it possible to identify the attributes of, and differences between traditional (local) and modern (global) (or any other) environments. The transformation from one to the other can then be conceptualized, as can the process of "development" as an aspect of *culture change* (RAPOPORT, 1983a), a very general process and hence broadly applicable. At least three conditions can be identified:

- **Rapid culture change**. This includes developing countries and spontaneous settlements in them, remote and rural areas in partly developed countries and recent immigrants.
- **Slow culture change** elsewhere as a result of changing ideals, values, fashions, familiarities with multiple images (through the media, travel etc.), and the loosening of economic, technological and cultural constraints. One result is, of course, that cultural landscapes often become more alike. Many examples can be found all over the world with similar housing and other buildings, city skylines, parks and so on. The question then becomes whether this is inevitable (i.e. will continue), will change or might even reverse.
- There are **countervailing forces** which strengthen the local. As one example, long-term immigrants (and many groups generally) try to revive aspects of their culture, (language, food, religion, customs, art etc.). Thus, in the case of young Japanese-American festivals, ceremonies, and music (Taiko drumming) are used to keep and revive their ethnicity, also maintained by Buddhist temples, sports leagues, and family. (NAVARRO, 2004). No role is mentioned for the physical environment, but there may be one (indirect, via identity, supportiveness etc.) (cf. RAPOPORT, 1981a, 1983a, 1990b, 1999, 2000a, 2003, 2004). These revivals are often the result of increased confidence and choice, sense of loss and regret (including about traditional environments). Note that cultural differences persist not only in different countries, but regions, cities, neighborhoods and even institutions. For example, the use of culture in the study of work places is growing and could increase, and there is evidence that workplaces can be culturally distinct; open spaces and their use, neighborhoods and dwellings are even more variable.

The result is that there may well be reversals both of "culture" and the built environment. As one example, in the U.S. one finds new housing built to resemble centuries old environments, including factories (for loft housing). This is happening even in new cities that never had a loft tradition (ROMERO, 2003). The persistence and revival of traditional styles more generally is part of the same phenomenon.

At this point some further essential dismantling and conceptual development become possible:

- The first is, of course, that of "culture" itself (e.g. RAPOPORT, 2000a; 2003, 2004, figs. 43-45).
- Second, it is possible to specify different forms of syncretism/synthesis between different components of both core (traditional) and peripheral (modern) elements both of culture (as derived above) and the cultural landscape, which respond to various forces, choices etc. (cf. RAPOPORT, 1983a).
- Third, it is possible that there may be more than one core, i.e. **multiple cores** (or "multiple packages") in different cases, with different rates of change (SHENNAN, 2002, pp. 79-83) – although still significantly lower than among peripheral elements. Among such core elements may be social organization or family structure, religion, rituals, language, food, music, crafts, decorations and other aspects of culture, which may need appropriate supportive environments to work and survive (e.g. internal and/or external space organization, site layout etc.). Peripheral elements often include image, materials, color, technology, etc. Different combinations among all of these result in different outcomes i.e. different cultural landscapes.

This means that many forms of syncretism/synthesis become possible. In effect a large number of scenarios can be derived related to various models of acculturation (RAPOPORT, 1983a; DEARBORN, 2004). This clearly responds to the need, stated earlier, for a more specific, operational approach which can be applied generally to a great many specific (local) contexts. Note that syncretism (and hence some specificity) operates even in conditions of high criticality, such as technology (e.g. Foster cited in RAPOPORT, 1983a). It has recently become apparent that even high tech design may need to be adapted to different cultural contexts so that, for example, Intel is using anthropological research in 19 cities, in 7 countries in Asia and the Pacific (ERARD, 2004). This is clearly even more the case for the residential environment as a system of settings, including open spaces, specialized institutions, shops, markets (see photo in ERARD, 2004) etc.

The many possible scenarios make any complete listing impossible (and unnecessary). A few quick, simple examples may, however, be useful. These concern a frequently discussed, and much noticed, aspect of built environments – the image expressed in the external appearance of buildings.

- For example there can be a modern exterior image with more traditional internal space and setting organization, rules etc. (e.g.19th C. Carene Villas (Asfour cited in RAPOPORT, 2000a), Puerto Ricans in Boston (Jopling cited in RAPOPORT, 1990b); the Tswana (RAPOPORT, 1983a)).
- There can be a traditional external image with (more) modern internal organization (the Navaho (RAPOPORT, 1983a), Bhutan, by law). Both the external image and interior organization may become fully modern, and there is then a complete loss of tradition in the fixed-feature domain, although semi-fixed features (furnishings) and non-fixed features (behavior) may continue (e.g. examples of Navaho (Kent) and Mexican-Americans (Pader cited in RAPOPORT, 2000a).
- Finally, both the external image and its expression, the internal organization, furnishings and behaviors may all remain full traditional. This, due to comfort, standards and, above all, meanings is most unlikely (as will be seen later).

Such scenarios can be further articulated on the basis of **building types**. I would argue that in the case of universities (which are universal by definition) airports, banks, office buildings and the like (all new types) even to search for traditional imagery is misguided (e.g. Barnard cited in RAPOPORT, 2000a). However, there is evidence that in the case of space and setting organization and behavior traditional elements may still be significant in such building types. Traditional imagery and space and setting organization will possible be most relevant for outdoor spaces; religious, cultural and symbolic structures, shopping facilities and, above all for residential environments in the broad sense in which I define them (e.g. RAPOPORT, 2000a, 2003, 2004).

Different scenarios are also likely on the basis of **scale**. Considering the range from region, through settlement, neighborhood, open-spaces, block or equivalent, dwelling and part of dwelling, tradition is likely to be significantly more important, to be used and to be useful at small rather than large scales (as I will discuss later).

All scales above that of parts of dwellings and single dwellings can be considered as cultural landscapes (with their specific ambience) including even just a few dwellings taken together which

they always are!) In the case of cultural landscapes one can identify at least three general conditions that lead to a variety of more specific scenarios:

- Total change may occur rapidly in the cultural landscape, responding to aspects of culture change[5] and economic and media globalization, with the traditional landscape eliminated (this is not an uncommon eventuality – e.g. Kuwait City over the past 50 years). As we have seen, such change is more likely at larger scales (and is not new, e.g. Elvin (2004) on China) and for certain building types and types of settings (e.g. the development of 'machine space' (for cars)). Peripheral elements are also likely to change more rapidly and completely than core elements with some syncretism still present (especially in semi-fixed and non-fixed features and ambience.
- There may occur a juxtaposition (clash?) between two cultural landscapes – the modern, global, highly heterogeneous landscape of the first condition and the much more homogeneous traditional landscape (inevitably modified and hence syncretic (see the third condition)). This may only be a temporary phase, but offers the best opportunity to save such traditional landscapes (if that is desired, for whatever reason).
- Traditional landscapes themselves begin to change, first in large cities, then towns and finally remote rural areas (RAPOPORT, 1983a). With increasing heterogeneity of components and expressions of culture (especially related to meaning (see later), there follow similar changes in setting types and (also spatial) organization, imagery, standards etc., and hence cultural landscapes (RAPOPORT, 1992c, pp. 40-41). Thus, although they will change, they will retain their variability, i.e. a local character.

Although, as already mentioned, there are countervailing forces and different specific forms of response, i.e. syncretism between selected peripheral and (multiple) core elements, the process of change is difficult to stop and seems almost "inevitable." The topic to be emphasized, therefore, is the possible role of traditional (=local) cultural landscapes that still exist. Is there any role? If there is a role, what is it?

Among the reasons that make the preservation of traditional cultural landscapes difficult (if not impossible) are both internal factors (inhabitants' views) and external factors (political, ideological, economic, professional, institutional etc.). (RAPOPORT, 2002a). In both cases there are conflicts among different evaluations of environments by different groups because of different environmental quality profiles (RAPOPORT, 2003, 2004, fig. 27). In this, two aspects play a major role – standards and meaning. The standards of many traditional environments often are, objectively and instrumentally, unacceptably low. These include space standards, low comfort levels, inadequate hygienic conditions with negative consequences for health, etc. The problem of meaning is more complicated and difficult to deal with, because it involves ideals, status and the like and hence emotions. Moreover, it may be difficult to disentangle meanings from standards which themselves have latent aspects and may, therefore themselves (often) communicate meaning (RAPOPORT and WATSON, 1972; Choldin cited in RAPOPORT, 1976; RAPOPORT, 2000a).

In dealing with the instrumental aspects of standards (i.e. when meaning is not involved) two responses are possible. I will use a simple example – smoky kitchens – based on my observations. In the case of Jamshedpur (Bengal, India) there are some self-built environments which work well regarding privacy, safety, family structure, religion, activity systems and which I find of exceptional design quality. The kitchens are smoky and, as result, it has been decided to demolish them. In rural Bhutan, a similar problem in traditional houses led to a different response – a program to develop and provide ways of venting smoke outside from the traditional stove/kitchen.[6]

The issue of meaning raises many more complications and presents the major difficulty not only for any possible preservation of traditional (local) cultural landscapes but even for studying them and analyzing and appreciating their many positive qualities. This topic merits more extended discussion because it also bears on the issue of 'sustainability' as more detailed analysis clearly shows (RAPOPORT, 1994 with examples from China, Egypt, New Guinea and elsewhere cf example of Nepal in RAPOPORT, 2000a; cf RAPOPORT, 1988a, 1990b, 2003, 2004). It appears that the disappearance of traditional (local) environments is due largely to the negative meanings attached to them and to the highly positive meaning of modern environments (e.g. RAPOPORT, 1983a, 1995d (1973)). Traditional cultural landscapes reflect the past – "backwardness," poverty, hardship, lack of comfort, etc., whereas high-rise office and other buildings, and international hotels indicate development, a modern economy and standards; freeways, highways and major roads mean car ownership and increased mobility' advertisements and billboards indicate higher standards of living, choice of services and consumer goods; "suburban" housing communicates high standards of space, privacy, services etc.

These contrasting meanings of traditional (local) and modern (global) cultural landscapes lead to the perceived obsolescence of the former and their rejection by planners, decision-makers and, very often, their inhabitants. Their good qualities are ignored, and the negative (and often unforeseen) consequences of apparent improvements are not considered (e.g. Rapoport 1978, 2003, 2004).

The resultant choices are thus the result of both pushes (rejection of traditional environments) and pulls (attraction of modern environments). Recall also that increased choice is a major aspect of modernization and choices reflect changes in ideals, values, norms, images, wants, lifestyles, and other aspects of culture. These choices may be unrealistic (not to be achieved immediately or ever) and may even differ, but in all cases they are a result of conflicts due to a lack of congruence among the environmental quality profiles of different actors, frequently based on (RAPOPORT, 2003, 2004, fig. 27).[7]

The attraction of the new, in terms of housing (and the names of housing developments (RAPOPORT, 1977, 2000a, 2003, 2003)), lifestyle, fashion, food, cooking, cosmetics, furniture and furnishings etc. (in this case in China) is well illustrated by a story on Zhou Zhu. The emphasis is on a "consumer revolution" and it is described in terms of "a dream" (a point I emphasized in RAPOPORT ,1990b) (FRENCH, 2004a). In Luang Prabang, Laos there is a conflict between UNESCO attempts to save traditional timber houses and prevent concrete houses that disrupt the landscape whereas residents want them. To them such houses (and timber) are symbols of poverty, and modern, concrete dwellings are wanted, but tastes "go beyond concrete houses" (PERLEZ, 2004).

Although the preponderance of the available evidence (often anecdotal) strongly supports this position, it has largely had to be inferred from the data — the choices made and the resultant changes. I know of hardly any research that bears on this topic (but see Beckman in RAPOPORT, 1976, Kaitilla in RAPOPORT, 1994, Sadalla and Sheets, Shokoohy and Shresta et al. in RAPOPORT, 2000a). One result is that the conclusions are probably overgeneralized and there are a variety of groups with different responses, different environmental quality profiles and, if they are able to express their choices, different outcomes (see also note 7). This is suggested by ongoing work by one of my Ph.D students (Al Jassar, personal communication July 19, 2004). Without as yet investigating this further, he recently found evidence that older people in Kuwait, who had experienced traditional houses as adults, had very negative views about them and much preferred modern dwellings (which have so completely replaced traditional dwellings that hardly any are to be found in Kuwait City). Younger people, who either never expe-

rienced traditional houses, or experienced them as children, had positive feelings, expressed nostalgia about them and romanticized them, often describing elements that were hardly ever present (e.g. dense greenery and water in courtyards). Such findings also provide clues about which aspects of traditional environments might make them acceptable – or even desirable. Some other examples will be found in the "reading list."

Underlying the whole issue is an apparent (implicit) worry or feeling that globalization, as it results in the loss of traditional (local) cultural landscapes is bad. This immediately raises the question, why is it bad? What would be better? What is better? Better for whom? Better under what conditions? Why is it better? On what basis does one judge? How does one know it is better? How does one measure "better"? In other words, it is not always obvious, clear or self-evident what better or worse means; it may sometimes be counter-intuitive. In any case, before action is taken the case needs to be argued explicitly.

Several answers are possible:

- it represents a loss of part of the human heritage (analogous to loss of bio-diversity);
- there is an aesthetic loss, and possible economic loss (tourism);
- there is a possible loss of supportiveness regarding lifestyles, activity systems; defensive structuring, belief systems, identity etc. that may lead to a loss of cultural diversity (and choice); and,
- in terms of "sustainability" such environments represent a major investment of materials and energy.

These, and other possible answers seem valid. Therefore the discussion, which typically concerns saving or preserving actual traditional cultural landscapes is important and valuable. However, as already pointed out, instrumentally low standards and, above all meaning are obstacles, as are other forces such as economics, politics, ideology etc. (e.g. RAPOPORT, 2002a). Especially severe is the conflict between economic development and conservation. This is even the case with high-style, monumental buildings and complexes, but becomes very much more difficult (not to say impossible) in the case of "ordinary" environments, vernacular cultural landscapes which are not valued as highly.[8] Moreover, as already pointed out, unlike monuments such cultural landscapes are often evaluated negatively, including by their inhabitants. As a result such preservation, especially of large areas, is probably not possible and, possibly not necessarily desirable.

I have previously suggested that the preservation of the knowledge embodied in such environments, and the lessons they might provide, may be more important. That might allow the improvement of the instrumental problems (e.g. in standards) that such environments often present (e.g. RAPOPORT, 1983a, 1983b, 1988a, 1990a, 1990e, 1995d (1973), 2000b). Before such lessons can be learned, however, it must be accepted that such traditional environments have valuable lessons to teach us. As in the case of vernacular environments, spontaneous settlements etc., four positions are possible (RAPOPORT, 1987, 1988a, 1990a, 1990e):

- traditional environments can be ignored;
- their existence can be acknowledged, but it can be denied that they have anything of interest or value;
- they can be romanticized and attempts made to copy them; and,
- they can be analyzed in terms of concepts and theory and try to derive lessons applicable to research, theory building or design.

It should be emphasized that the fourth position above is the only valid approach (e.g. RAPOPORT, 1983a, fig. 1, p. 251; 1990a, fig. 2.1, p. 31; 1990e, fig. 419, p. 100). It follows that any lessons cannot be direct; copying is not an option. Principles and lessons can be derived by analyzing such environments and applied in deciding what should be done (e.g. Programming) and how it could be achieved (e.g. by developing rule systems (e.g. RAPOPORT, 1992c, 2000a, (2003, 2004)).

Clearly much can be said about the possible lessons traditional environments can provide, for example about energy and "sustainability" (RAPOPORT, 1987, 1994), pedestrian streets (RAPOPORT, 1990a), supportiveness and aesthetics (RAPOPORT, 1983a, 1983b, 1988a) and so on. More generally, one lesson to be emphasized here is that in the case of smaller scale neighborhood and residential environments, slow-speed human spaces (as opposed to machine, mainly car, spaces) traditional environments often provide a good fit with human behavior, activities, etc. and they also vary more with culture.

This is because machine (car) spaces are highly invariant and inherently global, for several reasons:

- Because machine spaces are a new type there is no tradition, i.e. they represent a modern universal. Therefore, if they are used, they are global by definition.
- Such spaces are also global because they respond to a single (mainly instrumental) function – high or moderate – speed movement (vs. the multiple functions, including latent function of people-spaces.
- The higher criticality of such spaces due to the requirements of vehicles and higher speeds imposes much greater constraints on possible forms a greatly limits alternatives (RAPOPORT, 1969).

Thus, freeways, their ramps, signs etc. are identical world-wide. Arterials and main roads are somewhat more variable (variability increases as speeds decrease) but are still very similar, particularly in their width, need for parking, problems of pedestrian crossings etc. This also applies to their related semi-fixed elements (traffic lights and signs, advertising, billboards, etc.). Note, however, that the languages used clearly differ, and that signage can be used differently (especially in slower-speed and pedestrian settings) producing the very different ambience of signscapes in Asia, North and South America etc. Although pedestrian spaces on the one hand share very similar perceptual characteristics (RAPOPORT, 1990a, Part III), they can vary more, show more variability in specifics, especially for static, often culture-specific activities, the settings for them, the rules that apply etc. They tend to differ greatly in terms of who does what, where, when, including/excluding whom, why and how. The result is that the ambience of such cultural landscapes differs greatly in different locales.

Due to the evolutionary (selectionist) processes that have operated over long periods of time in creating these traditional cultural landscapes, they have reached high levels of congruence with unchanged human characteristics, with their culture-specific expressions and with culture-specific activities, meanings, norms etc. in given locales (RAPOPORT, 2003, 2004, figs. 37-40). As a result, such environments possess certain attributes, which provide important, potentially valuable lessons for the design of people spaces. It needs to be emphasized that although local specifics must be considered when designing in a given locale, the full range of traditional environments must be used to develop the general approach and to derive any more general principles and lessons (RAPOPORT, 1990a).

Note that increased choice, as economic and other constraints weaken applies to the many expressions and components derived from dismantling culture. These are a most useful way to relate people and environments, both analytically and in design. Choices are now made about group membership, social and family structures, lifestyles, meanings and images, activities, beliefs and rituals, time use, recreation and so on. One consequence is the proliferation of lifestyle groups, the growing heterogeneity of the inhabitants of contemporary environments (al-

so due to increased mobility, immigration etc.) as opposed to the homogeneity of the inhabitants of traditional environments (RAPOPORT, 2003, 2004, fig. 47). If one takes seriously the idea that environments should reflect, be congruent with and supportive of people, then such environments should (and will) be equally varied. This is made easier as economic, technological and other constraints weaken (RAPOPORT, 1995c (1985)). It is significant that "diversity" is being discussed almost as much as "globalization," and is the theme of the 2005 EDRA conference. Note also the proliferation of studies relating cultural (i.e. group) differences to psychiatry, business, sport, medicine, etc. (RAPOPORT, 2003, 2004).[9]

Traditional environments, considered globally, provide the fullest range of possibilities, a repertoire of human responses to an extraordinarily wide range of conditions, contexts, needs, wants, cultures, constraints, etc.; in effect they provide a "laboratory" as it were, a repository of a great deal of knowledge from which one could learn very important, possibly essential lessons (RAPOPORT, 1990a). It is, therefore, essential not to lose this "cultural gene pool" and the lessons it can provide through research. One needs to identify the multiple attributes of traditional (local) cultural landscapes, their core elements that provide supportiveness to various core elements of the culture of various groups. Then, rather than designing the landscapes themselves one might try to design rule systems whereby peoples' many independent choices and decisions cohere into distinctive cultural landscapes. This is particularly important for the future, given the increasing emphasis on participation, local control and group identity. The rule-based approach is thus a general strategy which can lead to very different products which, because local people are involved, results in local cultural landscapes. This approach also allows for change over time.

This is important, because the loss (or blurring) of differences among cultural landscapes may be a result of temporary circumstances – as already discussed, there may recur a wish to "revive" or "recover" what has been lost, above all of the core elements related to identity and supportiveness. Therefore there is a need for open-ended design, for a frameworks and infil approach and the like, and research on them (e.g. RAPOPORT, 1995 l (1991)) as well as research on rule systems which themselves form part of such frameworks (RAPOPORT, 1992c, 2003, 2004).

The study and analysis of traditional cultural landscapes thus provide the essential data for lessons of how best to design for various lifestyle and other groups. These data provide a large repertoire of ways of responding to specific locales, i.e. *to become local.* To reiterate: It is not to be expected that the resulting cultural landscapes will be like those of the past. Rather, on the basis of the principles and lessons derived from an analysis of the many solutions that worked (and did not work) in the past, and on the basis of knowledge of human bio-social, psychological and cultural wants and needs (i.e. EBS) a variety of supportive, smaller scale environments, could develop. In this way it may well be possible to reconcile globalization with the variability of local cultural landscapes, with all the advantages this implies.

Conclusion

Since I want to keep this paper focused on the approach and general, I will not propose specific solutions. But some suggestions for a possible, more specific development of argument can be made.

In doing this, I will not question the wisdom of relying on cars, the value of the infrastructure for cars or the appropriateness of the dominance of car spaces in global (including Chinese) cities. I will just establish the presence of this type of cultural landscape and the fact that it is, and will continue to be dominant for the foreseeable future, although it can be asked whether even there some forms of syncretism (especially at lower speeds) are possible.

A more important question, however, is whether there are other components of the urban landscape which are missing and, if so, whether traditional environments can provide necessary and useful lessons for the design. Clearly, I believe that the answer is that they can. A starting point are the very different attributes of car and people spaces (RAPOPORT, 1977 (pp. 240-247, especially Chapters 3 and 4, 1990a, Part III).

I have elsewhere illustrated the existence of small scale, local areas (neighborhoods) within the framework of larger-scale spaces; these illustrations have often been simplified, abstract and diagrammatic (e.g. RAPOPORT, 1977, fig. 5.4, p. 263; 1992c, fig. 2, p. 39, cf RAPOPORT, 1997a, 2000b). However, in many traditional cities, especially in Asia, this is a reality, and these two cultural landscapes can still be seen side by side. This is, in fact, an aspect of cultural landscapes generally, where one commonly finds high-style frameworks with vernacular infil (RAPOPORT 1992c, fig. 5, p. 43) – a pattern found in cities everywhere and many periods. This is also found in global cities today where the frameworks are traffic ways (freeways, arterials, etc.), lined by offices, hotels, banks, government buildings etc. These, as we have seen are global and constrained by the needs of cars. Behind them, however, one often finds the infil, surviving people spaces which are very different in scale, activities, ambience, etc.[10]

It is also the case that even the growth of metropolitan and megapolitan areas does not negate this phenomenon. In fact, people continue to live in, and identify with, much smaller scale local units (RAPOPORT, 1977). Neighborhoods not only survive but may be gaining in importance (RAPOPORT, 1997a, 2000b). Even in megalopolis (and Ecumenopolis – the ultimate result of globalization?) people still live locally so that differences, especially at these smaller scales, persist.

The local people spaces are often still highly traditional in their fixed, semi-fixed and non-fixed features and ambience. It is unlikely that all the little shops, vendors, gambling, playing, sleeping etc. that take place will remain unchanged. Such landscapes will not, nor can they, remain as they were (traditional). But the various forms of syncretism discussed earlier allow for the retention of much specificity and variability. Also, these settings often have important latent functions going well beyond their instrumental functions which new forms cannot always duplicate (RAPOPORT, 1990b, 2000a, 2003, 2004). Consider a story about a cobbler in Guangzhou who set up business, and does very well, in a traditional neighborhood (Tianhe Nanjie) in a lane where people play table tennis etc. (FRENCH, 2004b). Only some environments (like this traditional one) are able to accommodate this – and many other equivalent and even unforeseen activities.

These activities themselves, and the settings for them, will most likely change and be modified, and new ones develop, by culture change, acculturation, new technologies (cell 'phones, T.V., electronic games), higher dwelling space standards, etc. Their latent functions, however may remain or new settings may develop for them. The types of cultural landscapes which I have been discussing, however, allow for these, and other activities, uses, developments etc. They *complete* the systems of settings for systems of activities (including their latent, hence more culture-specific aspects) which, if only machine space and modern housing, shops etc. are available is *incomplete* – many components are missing. Moreover, one can see how people try to change these latter whenever possible (RAPOPORT, 1995i, 2003, 2004 (Postscript); TIPPLE, 2000) and this may even apply to trafficways which may be changed into traditional settings (LIU, 1994) – restoring their local character.

In more traditional design terms, cities made up of such varied, smaller scale, people-oriented environments reflecting local character, within global frameworks, would be more livable for residents, more complex, richer and more interesting and attractive for visitors and tourists.

Whether this will happen depends on both knowledge and will. Through appropriate research and attention to it, globalization need not result in uniformity, if that is not wanted. It also depends on politics, ideology and economics — and hence on policies, codes, institutions, regulations, etc. which need to be changed, and written in ways that make possible and encourage variability (RAPOPORT, 2002a). It further depends on the need for planners and designers to understand the nature of groups, their number and variety and hence the cultural specificity of cultural landscapes[11] and the nature and attributes of their ambience in all sensory modalities. They also need to think not in terms of designing the landscapes themselves but of designing rule systems that will achieve the desirable landscapes. It is also important to see such rule systems as one form of frameworks in open-ended design which allows semi-fixed (and even fixed-feature) elements to be used by various groups, with at one time and over time to express their identity and create local identity.[12]

All this, however, is part of another, and very different topic – the "how" rather than the "what" (and "why") of design.

Notes

1. It should be emphasized that terms such as social and family structure, lifestyle, activity systems etc. can themselves be made more useful and operational by further dismantling (Rapoport, 1990d, 1995e, (1990), 1999, 2000a, 2003, 2004).
2. Some recent personal experiences include music in a very remote Russian town (Providenie) where Russian words accompanied universal pop music. On a ship with a Russian crew, a request for "Russian music" provided a video with pop music and images indistinguishable from U.S. television – only the words and writing were Russian. Finally, during a dance performance in the Yupik (Eskimo) village of Gambell (St. Lawrence Is.) women wore (modified) traditional costumes, but the young men performed traditional dances in football jerseys, baseball caps (one worn backwards), sneakers etc.
3. However, as will be seen later, the story is not quite that simple.
4. See references to Hakim and Akbar in Rapoport (2003, 2004), and to Essex County Council, Ostrowetsky and Bordreuil, Vernez Moudon and Williams et al. in Rapoport (1992b, 1993a).
5. For examples, changes in various components and expressions of culture – in family and social structures, roles, lifestyles and activity systems, values, ideals, images, schemata, norms, etc.
6. Another example, at the scale of cultural landscapes is provided by spontaneous settlements where the alternative responses are demolition (which is still happening) and improvement (e.g. the Kampung improvement program in Indonesia). This is not a new idea, and was suggested in the early 20th century by Patrick Geddes for India ("conservative surgery") (Rapoport 1995h (1982), 1983a, 1988a).
7. Two examples from personal observations. In Sri Lanka, in 2002, inhabitants were upset when their greatly improved spontaneous settlement was being demolished, and replaced by high-rise apartments. In Seoul, Korea (in the early 1990s) when trying to photograph one of the remaining traditional neighborhoods, I was threatened by the inhabitants who thought an interest in it would prevent its replacement by modern high-rise apartments.
8. To use an example from Beijing, it is easier to preserve the Forbidden city, Temple of Heaven or Summer palace than the Hutongs.
9. For example a new Journal started in 1996 called *Ethnicity and Health*, current medical research on various specific groups in the U.S., etc.
10. This is the case in Bangkok, Indonesia, India and China (Beijing, Guanshou, Kaifeng, etc.).
11. Regarding China, and related only to dwellings (i.e. ignoring the larger cultural landscape) see the variety of dwellings shown in the 12-part CCTV TV documentary ("Talk on Chinese Residences") described in Lin (1994).
12. There is also need for research into the nature of the urban and other frameworks that would make that possible.

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