Contemporary Vernaculars:
Informal housing processes and vernacular theory

Peter Kellett
Global Urban Research Unit
School of Architecture Planning and Landscape
University of Newcastle upon Tyne, UK

Abstract

Despite recent critiques, vernacular architecture is still largely associated with traditional practices and forms and assumed to be found only in rural areas and historic centres. The vernacular is identified directly with the past and is believed to be under threat from contemporary values and globalisation; and unless efforts are made to preserve and rescue it, then it will disappear. These perspectives tend to be based on static notions of culture which underplay processes of cultural change and the material culture of construction. Such views are frequently clouded by romantic, visually-based preconceptions and value judgements which are similarly used to produce negative critiques of informal settlements. The views of the users rarely figure in these analyses: inhabitants of traditional environments are frequently keen to modernise, whereas inhabitants of informal settlements rarely select traditional materials and forms.

Whilst recognising the significance of vernacular traditions, this paper will argue that it is vital to acknowledge current building processes, particularly the 'popular construction' taking place on a massive scale in informal settlements throughout the developing world. These settlements are frequently assumed to be the opposite of vernacular environments, but on closer inspection we can find many parallels and similarities. Analytical frameworks which address the broad spectrum of non-professionally produced environments will be examined and their relevance demonstrated using data from a longitudinal ethnographic study of informal settlements in Latin America. The paper will explore the interface and overlap between traditional vernacular and contemporary popular processes, and will attempt to demonstrate that far from inhabiting separate universes there are many points of commonality. In short, if our definitions are appropriately framed, we may regard much contemporary construction to be a continuation of existing vernacular traditions.[1]

Keywords: informal housing, vernacular, contemporary settlements

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[1] This paper draws heavily on ideas developed in Kellett (1995) and Kellett and Napier (1995). An earlier version was presented at the First International Conference on Zagros Traditional Settlements, University of Kurdistan, Sanandaj, Iran, April 2008.

City Building: Informal Urban Housing

The cities of the developing world are expanding as populations increase. High proportions of these urban populations live in settlements produced through informal processes where 'ordinary' people plan, finance, construct and furnish their own dwellings largely independently of official regulations and professional input. Globally, it is estimated that 85% of new housing is produced in an extra-legal manner (Berner, 2001) and this is certainly true in Latin America where the squatters, *favelados* and ordinary citizens are the builders of the contemporary city.

This phenomenon of informal urban housing is not new. The poor have constructed their own dwellings around the urban centres of the rich and powerful throughout history. Circumstance vary throughout the world and in Latin America rural-urban migration began earlier compared with most of Asia and Africa, and by the mid 1960's a majority of the continent's rapidly increasing population was living in urban areas, many in improvised dwellings in 'squatter settlements'. For this reason most of the earliest writings are based on studies and observations from Latin America (Hernandez, Kellett & Allen, 2010).

At that time such settlements were ubiquitously viewed as visual and social pollution, in which untested negative stereotypes and prejudices about the morals, abilities and values of the residents were reinforced by the images of inadequate, disorganised and improvised shelters. Powerful interest groups were concerned about the radical political potential of such substandard places, but the predominant stereotype of informal dwellers was as pathetic, apathetic and delinquent rural peasants who really had no place in the city. These negative stereotypes of the poor as incapable of self-improvement were reinforced by the now discredited concept of the 'culture of poverty' propounded by Oscar Lewis (1965).

Re-thinking Informal Housing

During the 1960s a reassessment began led by the anthropologist William Mangin and architect John Turner. They inverted established thinking to suggest that far from being a problem such settlements could be the solution. Turner (1968; 1972, 1976) reinterpreted the simple shacks in the squatter settlements as the first stage in an incremental process of construction. Rather than being passive victims of circumstance he believed the poor demonstrated great energy and intelligence in the use of resources and in evaluating priorities. He describes the dwellers as rational and effective articulators of their own needs and priorities, and able to weigh up the relative merits of different strategies: short term discomfort and insecurity for longer term benefits such as independence, space and income generating possibilities. He articulated the idea of housing as essentially an activity or process: 'housing as a verb' rather than as merely a physical object (house). This emphasis on the underlying processes is fundamental because it changes the focus away from the visual and physical characteristics, i.e. what a house 'is', towards what a house 'does' for its occupants. In other words, away from product towards process.

Such a radical re-think provoked serious challenge from those who believed this approach was rationalising poverty and romanticising substandard housing conditions. They

rejected the individualisation of problems which should be the responsibility of the state; and depoliticised 'the housing problem' to effectively maintain the status quo. However the scale of the problem required action. The 1976 UNCHS Habitat conference raised the profile of self-help which then became a central plank in many national housing policies and international agencies.

Shelter or Architecture?

But institutional and state support of informal efforts failed to materialise on any significant scale. Hence more urban dwellers than ever are responsible for creating their own dwelling environments within a wide range of economic and cultural circumstances. However despite their immense scale the resulting built environments have been largely ignored and few have studied the built forms and spaces as integral components in the housing equation. Interestingly some who did, dismissed the positive significance of their findings because of the structural constraints within which the dwellings were created, and of the unacceptability of promoting approaches or policies which appeared to condone such conditions.

For example in a study of popular settlements in Colombia, Viviescas (1985:45) found "considerable expressive potential" but believes poverty inhibits meaningful impact on the built environment other than to produce the barest of shelter and "a penurious kitsch." This is highly questionable as apparently equivalent constraints of rigid social structures, climate and limited resources have been identified as key formative factors in traditional vernacular environments which are acknowledged to be both expressive and supportive. Why have informal urban environments been interpreted so differently compared with traditional vernacular settlements?

Vernacular: from Visual Bias to Holistic Approaches

Studies of traditional vernacular environments, especially those by architects, have frequently produced romantic and naive analyses by concentrating on visual appearances independently of social structures and economic conditions. This focus on the visual also meant that few such scholars made more than a passing reference to informal settlements, precisely because they did not appear to share any of the positive formal characteristics which were so 'self-evidently' an inherent part of traditional vernacular environments. This superficial approach was epitomised in the pioneering work of Rudofsky (1964), but is still common despite several sharp critiques (Highlands, 1990:39; Oliver, 1990:158; Turan, 1990).

A group of theorists have proposed analytical frameworks designed to redress the previous imbalances and partial interpretations surrounding vernacular environments (Lawrence, 1987, 1990; Rapoport, 1988; Stea and Turan, 1990, 1993; Oliver, 1990, 2006). Such frameworks are more holistic and comprehensive in nature and are seeking to accommodate process, product and use characteristics, as well as address issues of constraint and context. The broader scope and greater complexity of such frameworks can more naturally include informal settlements as part of the wider spectrum of non-professional environments, but to date have been generally applied only in traditional environments. This papers will use such approaches as analytical tools to restore a view of the built form of informal settlements whilst simultaneously accommodating the ideological and economic contexts in which such

environments are produced; in other words to examine the built form alongside process aspects.

Rapoport: Constraint and Choice

With a background in vernacular studies and people-environment relations Rapoport (1977; 1988) has also turned his attention to informal settlements. He believes such settlements are significant from an architectural perspective, and argues that "if vernacular design is defined properly, spontaneous settlements can be shown to be its closest contemporary equivalent" (Rapoport, 1988:53). He then asks a question which raises several issues pertinent to this discussion:

> *"How is it that people who are often illiterate, with very limited resources and power, and hence operating under stringent constraints- economic, informational, political, and so on - are able to produce settings and environments that I at least judge to be vastly superior, in terms of cultural supportiveness and perceptual quality, than designers working in the same places? These environments are frequently even of higher quality than those of designers working in much more developed and wealthier places. The environments of spontaneous settlements are frequently comparable in quality to those of traditional vernacular, many of which professional designers admire"*
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> (Rapoport, 1988:72).

He substantiates his claims with only limited and partial evidence, but although he appears to overstate his case, it is helpful in that it challenges the predominant view and encourages us to test the validity of his assertions.

Rapoport is interested in the 'design quality' of spontaneous settlements and in the way that they respond to the aesthetic and cultural needs of their inhabitants (Rapoport, 1988:51). He argues that such environments are the outcome of numerous individual decisions taken over a long period of time, but which collectively add up to 'recognisable wholes'. This is because there must "... be an implicit model or cognitive scheme shared by all the individuals making apparently independent decisions" (52). In order to describe these qualities he identifies a large number of both process and product characteristics which may be present to various degrees in particular environments (see Table 1).

This approach not only provides a tool for analysing a specific environment, but also to make comparisons between different situations, including other types of vernacular as well as professionally produced environments. He concludes that if this we would find that informal settlements are "... closer to traditional vernacular than to any other environment and farthest from professionally designed or 'high-style' environments" (Rapoport, 1988:55).

Table 1: Process and Product Characteristics of Spontaneous Settlements

Process Characteristics	*Product Characteristics*
1. Identity of designers	1. Degree of cultural and place specificity
2. Intentions of designers	2. Specific models, plan forms, and morphologies
3. Anonymity of designers	3. Nature of relationships and underlying rules
4. Reliance on a model with variations	4. Presence of specific formal qualities
5. Presence of a single model	5. Use of specific materials, textures, and colours
6. Extent of sharing of model	6. Nature of relation to landscape
7. Nature of underlying schemata	7. Effectiveness of response to climate
8. Consistency of use of a single model for different parts of the house-settlement system	8. Efficiency in use of resources
	9. Complexity due to place specificity
9. Relationships among models used in different environments	10. Complexity of a single model with variations
	11. Clarity of the environment: order expressed by the model
10. Specifics of the choice model of design	12. Open-endedness allowing changes
11. Congruence of choice model with ideals of users	13. Presence of 'stable equilibrium' vs. the 'unstable equilibrium' of high style
12. Degree of congruence between environment and culture-life style	14. Complexity due to variations over time
13. Use of implicit vs. explicit design criteria	15. Open-endedness regarding activities
14. Degree of self-consciousness of the design process	16. Degree of multi-sensory qualities of environment
	17. Degree of differentiation of settings
15. Degree of constancy vs. change of basic model	18. Effectiveness as setting for life style and activity systems
16. Form of temporal change	19. Ability of settings to communicate effectively to users
17. Extent of sharing of knowledge about design and construction	20. Relative importance of semi-fixed features vs. fixed feature elements.

Source: Rapoport (1988:54)

Shared Models and Patterns

Several of the process characteristics listed by Rapoport relate to the presence of shared models. He believes that such models (partially) account for some of the visual coherence which he notes, and where absent can be explained by the state of flux between "... traditional cultural core elements and newly introduced elements highly desired by builders and users." Such elements include forms, materials and services (Rapoport, 1988:52). There are many similarities between this and the work of Christopher Alexander who identified 'timeless ways of building' using 'pattern languages' (Alexander, 1977, 1979). Such shared patterns are able to provide the underlying basis for observed visual coherence with timeless 'indescribable' qualities which occurs only if the patterns are 'alive'. In common with both Rapoport and Turner he recognises the importance of process at the centre of housing: "... life cannot be made, but only generated by a process" (Alexander, 1979:174). Similarly he emphasises the role of people; compare for example: "The power to make buildings beautiful lies in each of us already" (Alexander, 1979:14) with: "... the most plentiful and renewable resources... are possessed by people themselves as users" (Turner, 1982:99).

Table 2 Comparison of Terms and Concepts

Turner	Alexander	Rapoport	Stea and Turan
housing by people	people-designed	identity of designers	mode of production
	egoless	anonymity of designers	
housing as a verb	timeless way	process	placemaking
	pattern language	shared model	underlying rules of order
	patterns	settings	
close fit	comfortable, exact	congruence of choice model with ideals of users	
	wholeness	coherence	

Lawrence: Reciprocal Relations

In his empirical studies of domestic architecture, Lawrence (1987) lists the defining qualities of domestic vernacular architecture: identifiable as a building type (sharing qualities with others); specific to a period and to place (e.g. building materials); traditional design and construction rather than 'academically' inspired; and house the normal activities of ordinary people. This definition would clearly qualify many informal settlements as vernacular building (except traditional inspiration in some cases). However, informal settlements are clearly not academically inspired, and so fall more towards the vernacular type, a conclusion he shares with Rapoport (1988).

Lawrence (1987:32) proposes a *"more comprehensive approach that accounts for the reciprocal relations between a range of contextually defined factors which are implicated in the design and use of the built environment."* He groups the factors into three 'dimensions': 1) the physical or material factors, 2) societal and cultural factors and 3) individual or human factors, and urges us to study not only the form and meaning of dwellings, but also how form is used by people at different stages in their life cycle and throughout the history of the building. In addition to looking at macro-scale (economic, political, social and cultural influences), he collects oral and written biographical histories about the detailed use and design of the house at the micro-scale. Lawrence's approach is useful as a checklist of possible influencing factors, but the way he addresses the subject and the sources of evidence are potentially more useful than the framework itself. His approach is essentially an historical, temporal perspective, and is both evolutionary and typological, in that he describes the development of dwelling types and their social and geographical origins. His approach would appear better suited to the study of types in a particular region, and less useful for broader comparative analysis.

Oliver: Knowledge and Specialisation

Oliver (1987, 1990) adopts an approach similar to Rapoport but with greater emphasis on the evolutionary development of the house building process. Where Rapoport talks about vernacular and professional environments as opposites, Oliver uses the words tribal, folk and institutional (amongst others), and links them together as stages in a progression towards the ever increasing protection of knowledge (i.e. specialisation). He addresses vernacular architecture in terms of the sharing, or otherwise, of knowledge, or 'know-how', or 'technology' in the true sense of the word. Such knowledge is possessed by people about their own local conditions of climate, topography, natural hazard, materials, tools and methods. His conjecture is that in most traditional (especially tribal) societies most, if not all, knowledge about building is part of the common domain.

Oliver includes informal settlements in his evolutionary framework, but places them at the extreme end of a scale of knowledge specialisation, as the most unspecialised type. However there is considerable evidence of the use of skilled labour and small-scale contractors in informal settlements (Gough, 1992; Kellett, 1995, 2005). Where 'building' knowledge is rarely distinguished from 'design' knowledge this implies that knowledge is indeed concentrated and echoes a clear if flexible division of labour.

Oliver regards informal settlements as "processes of emergent vernacular types" which will be refined over time. He argues that vernacular architecture should not be imitated, but recognised for its own merits and conserved where appropriate. It is important to understand vernacular, but not to overlook its defects. He suggests that local knowledge has a major part to play in addressing the shortage of urban housing as the materials, skills and financial expenditure *"necessary to meet it by 'modern' means"* do not exist (Oliver, 1990:160). Like Turner, he implies that the builders of informal settlements should be part of the answer to urban housing problems.

Stea and Turan: Modes of Production

Stea and Turan's (1990) focus on 'placemaking' is relevant to informal settlement formation as their concern is with the *process* and *products* of placemaking activity, and the *use* of places (or the "consumption of built form"), which are similar to the analysis used by Lawrence and Rapoport. They define placemaking *"...as a form of **economic** activity, in its broadest sense, combining social, cultural, political, and material aspects of a society's **mode of production** [which is] a specific, historically occurring set of social relations through which labour is deployed to wrest energy from nature by means of tools, skills, organisation, and knowledge."(110, 13)*.

Using mode of production as a basis for analysis, they aim to *"improve our understanding of the domestic architecture and settlement patterns - 'vernacular' form - of traditional and transitional societies"* (Stea and Turan, 1990:121). They believe that *"most of today's societies are transitional and in the process of moving from one mode of production to another"* (17). The clearly transitional condition of many informally housed societies makes this a particularly apt tool for analysis.

They discuss informal settlements where spaces appear disordered and offer two explanations: firstly, the observer may not understand the "underlying rules of order", thus *" the apparent 'messiness' surrounding a squatter dwelling ... may actually be a 'stockpiling' system for building materials."* Secondly, apparent spatial 'disorder' may *"...result from a traumatic transition from one mode of production to another"* (Stea and Turan, 1990:117). This is similar to Oliver's view of informal settlements as a kind of nascent vernacular where tradition eventually emerges over time. They acknowledge that the destruction of the 'place/activity dialectic' can occur, or as Rapoport (1985:258) puts it, that *"..in some cases constraints may be more important than choice."* This implies that these frameworks can address the situations where imposed structural conditions appear to subsume personal attempts at participation.

Stea and Turan (1990:114) refer to context as the 'conditions of existence': *"A society's material conditions and its cultural conditions, taken together, are its conditions of existence"*. These break down into material conditions (climate, siting, resources) and cultural conditions (kinship, social and labour relations). Conditions of existence are accompanied by conditions of change which come from outside of society. The conditions found within a society which shape the response to external forces are referred to as the 'basis of change.'

The approach of Stea and Turan is similar to Rapoport in that they present ideals for comparison along a continuum. Where Rapoport uses the notion of societies as typically vernacular and typically professional, Stea and Turan start from the "primitive communist mode of production" where people truly participate in the making of place, and trace a development (similar to Oliver's evolutionary process) through increasing 'stratification' of society, and 'mystification', 'professionalisation' and 'commodification' of the placemaking process, until they reach the totally commodified environment that we have in the 'Capitalist West' where places are received by exchange rather than made and people are products of the environment rather than vice versa (Stea and Turan, 1990:115).

Within these differing modes of production they compare 'shelter' with 'property' as the "basic relationships in domestic architecture": use value is contrasted with exchange value; and social identity with individual/family identity. By presenting their ideas in terms of dialectics they allow the description of tendencies in settlements rather than forcing categories on cases, avoid generalisations and simplifications, and anticipate the likelihood of change or transition over time.

Comparing Theorists: Constraint and Choice

These frameworks have many common elements. The analysis of vernacular environments has moved away from viewing only the artefact, and focused attention also onto the people who shape, use and alter the form (and in turn are influenced by it). These frameworks all propose typologies which rely for their grouping or categorisation of examples on the kinds of societies which create the environments, or on the way labour is organised.

In early vernacular studies the artefact was first viewed and then conclusions about the people were drawn from this, here we are approaching from the opposite direction. The frameworks are now centred on comparisons of the societies in which form arises. The importance of the form itself has remained an element of vernacular frameworks, and it is this strength that informal settlement studies can recover if viewed properly as a type of vernacular. These frameworks offer the tools for handling complexity in societies and their range of built environments.

In traditional vernacular environments strong, largely natural constraints are believed to play a positive role. For example rigid social structures, climate and limited resources have been identified as key formative factors in environments which are acknowledged to be both expressive and supportive. Why have urban informal environments been interpreted so differently? Informal settlements are usually located in urban areas which are defined and controlled by dominant groups and therefore the key constraints are 'artificial' i.e. institutional, and man-made, and the resulting conditions can therefore be attributed (at least in part) to intentional physical and social marginalisation, and consequently human culpability for the conditions. In contrast to the stable context and slow, evolutionary pace of change in traditional vernacular environments, informal settlements by definition have emerged and continue to expand in conditions of considerable instability and uncertain, rapid change. To use Stea and Turan's terms, the conditions of existence (as well as external conditions of change) in which

such settlements are formed rarely remain static. This provides a further challenge in accommodating such dimensions within a classification framework.

Rapoport (1985:258) identifies the types of potential constraint: resource constraints, market constraints, ability to cope, willingness and ability to move, knowledge and information and finally external constraints. Although in a particular situation certain constraints may be severe (e.g. resources) others may be weak, and as such facilitate the exercise of choice. He identifies the weakness (or absence) of official regulations, planning controls and building codes as well as formal professional ideologies as typical of informal environments (Rapoport, 1988:52). Such weak official constraints and restraints may indeed open up fruitful opportunities for expression.

From Informal to Formal

Informal settlements achieve their distinctive (if varied) identity by reference and contrast with the formal, institutional and legal parts of city. Turner (1972) proposed a typology of settlements in terms of physical development and degree of security of tenure, which included fourteen stages ranging from transient and tentative to complete and legal. He believed that security of tenure was crucial to unlock the creative energy and resources of informal dwellers, and in his case studies from Peru showed how over a period of years, dwellings and settlements consolidated when such security was achievable. What is fascinating is that fully consolidated and legalised settlements can become virtually indistinguishable from conventional formal residential neighbourhoods, despite contrasting trajectories.

Informal settlements have traditionally been defined in negative terms in relationship to formal parts of the city: absence of legality, substandard in terms of space and infrastructure, absence of permanent materials, etc. Effectively informal settlements have achieved their identity through what they are not, or do not have, in comparison with the formal. This is illuminating, particular as it is clear that in favourable circumstances, the consolidation processes may be regarded as a gradual movement away from what are regarded as informal characteristics towards increasing formality. However such an interpretation could lead to a continuance of the invisibility of the built forms of the earlier stages of settlement and consolidation, and to a denial of the valid architectural expression which can undeniably exist.

Drawing on the work of several theorists, this paper has attempted to demonstrate why and how we must revise our view of informal settlements, and attach appropriate importance to the study of the built environment. The inclusion of the dwelling object in this analysis allows a fuller picture of the decision-making process of the inhabitants with the full scope of possible influences which may impact upon the shaping of that built form. Through such an approach it is possible to identify multiple points of commonality to show how much contemporary construction is effectively a continuation of existing vernacular processes.

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Dr. Peter Kellett is a Senior Lecturer in architecture at the University of Newcastle, UK., and is a member of the Global Urban Research Unit (GURU). He can be contacted at P.W.Kellett@ncl.ac.uk