SQUATTER ARCHITECTURE? A CRITICAL EXAMINATION OF VERNACULAR THEORY AND SPONTANEOUS SETTLEMENT WITH REFERENCE TO SOUTH AMERICA AND SOUTH AFRICA

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The tradition of study that has grown up around the investigation of spontaneous settlements in the past three decades has tended to emphasize the process which gives rise to informally produced housing rather than the built form of the housing itself. As a result, only a partial understanding of such settlements has emerged because there has been a virtual absence of empirical data on “squatter” architecture. Meanwhile, frameworks designed to facilitate a holistic understanding of vernacular environments have recently reached a stage of maturity which allows descriptions of sufficient complexity to handle the great variety of cases found within the definition of the vernacular. Indeed, many descriptions of vernacular environments have the potential to include spontaneous settlement and hold the promise of affording a better understanding of these people-made places. Given that the word “vernacular” commonly refers to a language or architecture which has local rather than foreign origins, it would seem wholly appropriate to apply the frameworks of vernacular architecture studies to spontaneous environments. The aim of this paper is to suggest ways this might begin to be accomplished, to gain a more comprehensive and balanced understanding of both the product and process dynamics of spontaneous settlements and of the people who create and inhabit them.

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accommodate the structural contexts in which such environments develop.

Since many descriptions of vernacular environments have the potential to include spontaneous settlement, it would seem wholly appropriate to extend the use of such comprehensive frameworks to the study of spontaneous environments. Such a project would also add to the work already done on traditional environments.

The paper begins by sketching the way spontaneous settlements have been studied over the last fifty years. It then reviews the key positions of theorists who have developed appropriate investigative approaches for the analysis of vernacular settlements. The issues raised by these frameworks about how the view of informal settlements should be altered are then discussed with illustrations from two countries: Colombia and South Africa. The conclusion looks at ways in which the findings may be employed, but counsels against drawing oversimplified lessons from the data.

SQUATTER SETTLEMENTS: FROM EYESORE TO UPGRADING

The phenomenon of informal urban housing is not new. Throughout history, the poor have constructed their dwellings around the urban centers of the rich and powerful. For example, in Latin America, according to Jorge Hardoy, “self-help was as characteristic of the past as of the present Latin American city. In both, the self-built shelters of the majority surrounded the small city core built for pre-Columbian, colonial or national elites.” Neither is such a pattern of residence a phenomenon exclusive to the so-called Third World, as a brief glance both at the history of European urbanization and the present condition of the “homeless” in many European and North American cities demonstrates.

What is different today is the scale of activity, a situation which has its roots in the massive movement of rural people away from subsistence agriculture toward rapidly expanding urban centers. Compared with most of Asia and Africa, these migratory movements occurred earlier in Latin America, and by the mid-1960s 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 on spontaneous settlements are based on studies and observations made in Latin America. In contrast, many African countries are still predominantly rural — with the exception of a few, including South Africa — and movement towards urban centers has been much more recent. South Africa’s rapid urban growth began in the 1970s with the establishment of informal settlements on the distant peripheries of cities structured according to apartheid legislation.

Initially, spontaneous 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, disorganized and improvised shelters. Such views became generalized; for example, according to one author, “every Third World city is a dual city — an island of wealth surrounded by a black belt of misery. Outside the bright, shining modern city of skyscrapers, flyovers and desirable residences, the poor are camped in squalor, disease and neglect, in shacks and huts made of plywood, cardboard, mud or straw . . . .” Powerful interest groups were concerned about the radical political potential of such substandard places as breeding grounds for revolutionary activity, particularly given the success of the Cuban revolution in 1959, but the predominant stereotype of such settlers was of 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,” as propounded by Oscar Lewis.

FROM PROBLEM TO SOLUTION

During the 1960s a reassessment began, spearheaded by anthropologist William Mangin and architect John Turner. Both men had been closely involved with the squatters in Lima over a long period and could base their interpretations on empirical data. They inverted established thinking and suggested that, far from being a problem, such settlements were, in fact, a solution. Turner reinterpreted the simple shacks in the squatter settlements as the first stage in an incremental process of construction. Far from being passive victims of circumstance or being trapped in a “culture of poverty,” he wrote that the poor in such settlements demonstrated great energy and intelligence in the use of resources and in evaluating priorities. He described the residents of such districts as rational and effective articulators of their own needs and priorities, who were able to weigh the relative merits of different strategies: for example, short-term discomfort and insecurity, in return for longer-term benefits such as independence, space, and income-generating possibilities. “Contrary to the generalisations made by the mass media and an uninformed middle-class, these squatter settlements are no more slums than any building or development under construction,” Turner wrote. From his analysis of such incremental processes in the barriadas of Peru, he articulated the
idea of housing as essentially an activity or process — "housing as a verb," rather than as a mere physical object. Turner's emphasis on the underlying processes refocused discussion away from visual and physical characteristics (i.e., what a house "is") toward what a house "does" — in other words, away from product and process.

In addition to reinterpretting informal user-controlled environments, Turner also critiqued state-sponsored social housing projects, the conventional alternative to spontaneous settlements. He defined the fundamental issue as being one of control over decision-making, and he argued that centrally administered bureaucratic (heteronomous) systems were intrinsically inefficient compared to locally controlled (autonomous) approaches, which could achieve high use values and a close fit between dweller and dwelling. He contrasted the environments that resulted from the two approaches from a variety of perspectives, including the official insistence on high physical standards that inevitably led to high construction and maintenance costs. He also commented on the appearance of mass housing projects, heavily influenced by the "functionalism" of the Modern Movement: "their naked giness is often alien and unattractive while the honestly poor shack is often personal and warm. The most important architectural advantage of the squatters' procedure is the consequent adaptability of space and structures to the changing needs and behaviour patterns of the family."

Turner then proposed that such an interpretation could form the basis for new approaches to housing delivery that would place the users at the center of a decision-making process supported by the state and other organizations. He suggested that the potential of existing spontaneous settlements should be consolidated by upgrading programs, and that new developments could take the form of serviced sites, in which new residents would have the "freedom to build" dwellings that reflected their own priorities and budgets. This approach, he believed, would make more effective use of scarce resources by unlocking the previously unacknowledged resource of the people themselves, and result in more responsive and appropriate dwelling environments.

Not surprisingly, such a radical reconceptualization attracted considerable attention, and a long running "self-help housing debate" began. The most vigorous criticism of Turner's ideas came from left-wing academics who believed the "Turner school" was rationalizing poverty and romanticizing the substandard housing conditions of the poor. Squatter environments reflected not freedom and ingenuity, they argued, but serious structural constraints, injustice, and exploitation of the poor. They claimed the solution lay not in encouraging the poor to build their own housing with their own limited time and meager resources, but in fundamental structural changes which would address the dramatically uneven distribution of power and resources throughout society. They rejected the individualization of problems they saw as the responsibility of the state; in short, they argued, such approaches depoliticized "the housing problem," and effectively maintained the status quo. In addition, academics outside Latin America questioned the apparently universal claims about the potential of self-help as a solution applicable in different cultural and economic conditions.

Despite the theoretical eloquence of many of the above views, the reality on the ground demanded more practical responses. The proportion and scale of the urban population throughout the world living in informal housing areas was accelerating rapidly. The capitals of the newly independent African states becoming poles of attraction to many Africans who had previously been excluded from urban areas, and urban growth rates worldwide were increasing through improvements in public health. In most places, urbanization was also taking place without parallel increases in industrialization and economic development. In addition conventional housing approaches, which led to the demolition of informal housing and its replacement by "Western" models of state-subsidized and state-planned social housing projects, were proving both socially and economically expensive. As a result, receptivity increased to what was soon to become the new self-help orthodoxy. The new trend became particularly apparent at the 1976 UNCHS Habitat conference in Vancouver. Ever since, the promotion of self-help has become a central plank in most national housing policies, as well as a standard policy of international agencies such as the World Bank and the IMF.

**SHELTER OR ARCHITECTURE?**

Despite initial intentions, institutionalization and state support for informal efforts have, in reality, failed to materialize on any significant scale. Demolitions and forced relocations are now rare, but the ideal of a partnership between the state and citizens has generally not been realized, nor least because of deteriorating economic circumstances. Hence, more urban dwellers than ever before are now responsible for creating their own dwelling environments within a wide range of economic and cultural circumstances. However, despite the immense scale of such activities, the resulting built environments have been largely ignored.

The preceding discussion has outlined how Turner proposed that many informal settlements could in fact be seen as long-term building sites, and how he argued that many of the
obvious physical inadequacies of spontaneous settlements would gradually be overcome through processes of incremental improvement. Numerous studies have since documented various aspects of such processes, and others have focused on the social aspects of living in such settlements. But few studies have chosen to examine the built forms and spaces as integral components in the housing equation. Interestingly, some of the researchers who did study this issue dismissed any positive aspects of their findings because of the structural constraints within which the dwellings were created, and because of the unacceptability of promoting approaches or policies which appeared to condone such conditions.

For example, in a study of spontaneous settlements in Medellin, the Colombian architect Fernando Viviescas found "a considerable expressive potential," which might form the basis for a "genuine architectural position" given the right "cultural development context." However, Viviescas also wrote: "[the] circumstances under which these 'barrios' are established prohibits a reference to architecture. Rather, we are referring to the basic, immediate and desperate need for shelter." Effectively, he was arguing that poverty denies the very possibility of personal choice in urban circumstances. Such poverty inhibits meaningful impacts on the built environment other than the production of the barest of shelter: "the spatial configuration of these barrios responded not so much to any authentic development initiating from within, but rather to an inevitable (given the material conditions) impoverished superimposition of ideological, aesthetic and environmental values originating in other more affluent parts of the city. . . . The environmental result tends inevitably towards a penurious kitsch." As a consequence, he rejected the self-help approach to solving the housing problem as an "imposed solution," which "holds no real possibility for improvement in the conditions of existence of Colombia's citizens nor guarantees any real opportunity of architectural expression for the poor." Such bold and generalized assertions cannot remain unchallenged. Without for one moment denying the reality of the extreme conditions of poverty and injustice which are increasingly prevalent throughout the Third World, it is curious that the apparently equivalent constraints of rigid social structures, climate, and limited resources have been identified as key formative factors in the production of traditional vernacular environments, and these are frequently acknowledged to be both expressive and supportive. Why have urban spontaneous environments been interpreted so differently compared with traditional vernacular settlements? Why has there been so little interest in studying the forms of spontaneous settlements, especially when informal processes have become the predominant housing production method in many Third World cities? The low level of academic interest can be illustrated by examining the content of the 200 papers in the first 51 volumes of the TASTE Working Paper Series (1989-93). Only twelve of the papers in this group, or 6 percent, appear to address issues of spontaneous settlement. Considering that spontaneous settlements are increasing in scale, and traditional settlements are declining, this would appear to be a surprising imbalance.

REASSESSING VERNACULAR: ANY SPACE FOR THE SPONTANEOUS?

In contrast to the prevailing absence of formal analysis of spontaneous settlements, studies of traditional vernacular environments — especially those by architects — have frequently produced romantic and naive analyses of the built forms, not least by concentrating on visual appearances independently of social structures and economic conditions. This approach, epitomized in the pioneering work of Rudofsky, and so effectively dismissed by more recent critics, continues. For example, when discussing Anatolian vernacular, Denel writes: "even at the expense of scholarship and proper methodology and even at the risk of being proven incorrect, it is imperative that hypotheses be immediately developed based on observation, assumption, rumour, hearsay, available data and common sense." Fortunately, others are not prepared to rely on such improvised and inadequate methods and are willing to do both the serious theoretical thinking and painstaking empirical fieldwork. Such efforts are producing promising results.

A group of theorists have recently proposed analytical frameworks designed precisely to redress the previous imbalances and partial interpretations surrounding vernacular environments. 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 spontaneous settlements as part of the wider spectrum of nonprofessional environments, but to date these approaches have been generally applied only in more traditional environments. A key aim of this paper is to use such approaches to raise the level of attention paid to the built form of spontaneous settlements, while simultaneously accommodating the ideological and economic contexts in which such environments are produced — in other words, to examine the built form of spontaneous settlements alongside process aspects in a way that is integrally anchored within specific contexts. This does not prejudice any outcomes as to the qualities of such built forms, as we can neither anticipate nor generalize, but there are several convincing reasons why we
consider the attempt to be valid. Such reasons include the widespread and increasing scale of spontaneous built form; the need to make a record of it (as archaeologists do) for perpetuity and as a potentially valuable database of spontaneous settlements; the need to restore the lost balance in analysis; the desire to acknowledge the creative (and possibly uncreative, where constraints dominate) efforts of people; and the desire to learn from the vernacular, and possibly even, as professionals, to learn to use the positive parts of whatever grammar we may discover in the contemporary urban vernacular — in other words "learning to speak the vernacular."^{11}

We now turn to a discussion of existing theoretical positions in the study of vernacular environments that might also play a role in the examination of spontaneous settlements. In seeking to ascertain the relevance and significance of the work of theorists in the area of vernacular settlements, a set of questions was asked of them. What was the aim of their study, i.e., what fundamental question were they seeking to answer? How did they define the kinds of settlement they were examining, and did their definitions include or preclude informal settlement? How did they structure their approach and ideas, i.e., what was their methodology? What terms of reference or framework did they use for comparing examples? On what cases did they test their framework? And what were their conclusions regarding their own frameworks and their anticipations for using the findings which were the result of their approach? Only five of the theorists considered are reviewed here, with passing reference to two others.

**LAWRENCE: A LARGER BODY OF EVIDENCE**

Roderick Lawrence’s stated aim is to gain a fuller understanding of the design, meaning and use of dwellings, using as wide a range of historical evidence as possible, including the kinds of “architectural, cultural, social and psychological factors that ought to be considered in a complementary way.” Based on these findings, he investigates “how architectural features of domestic settings reflect, catalyse or inhibit social and psychological goals.”^{12}

In his empirical studies of domestic urban architecture, Lawrence draws on the work of Mercer and Brunskill to list particular defining qualities of domestic vernacular architecture. According to this framework, a dwelling should be identifiable as a type (i.e., it should share qualities with a numerically significant group) which is specific to a period and to a place (especially in terms of its use of building materials); its design and construction should be traditionally rather than “academically” inspired; and it should house the normal activities of ordinary people. This definition would clearly qualify many informal settlements as vernacular building, with the possible exception of the quality of traditional inspiration in cases where continuity with the past is tenuous or nonexistent. However, informal settlements are clearly not academically inspired, and so fall more towards the vernacular type (a conclusion which Rapoport also reaches after a detailed discussion).^{19}

Lawrence 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, especially residential buildings.”^{19} To structure these relations, he groups the factors into three “dimensions,” which form three sides of a cube: 1) the physical or material factors, 2) societal and cultural factors, and 3) individual or human factors.^{19} Physical factors include the availability of materials and technology, and site and climatic conditions; societal factors include historical and social values and roles, population structure and household composition, building regulations and economic factors; and individual factors include age, gender, marital status, personal beliefs, residential biographies, and external contacts and experiences.

One of Lawrence’s most significant contributions is that he not only urges study of the form and meaning of dwellings but also examination of 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 data from oral and written biographical histories about the detailed use and design of the house types he studies, thus filling out the picture at the micro-scale. Lawrence’s approach is useful as a checklist of possible influencing factors. In fact, the way he addresses the subject and the suggestions he makes as to 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 it describes the emergence of dwelling types and their social and geographical origins over time. Although he mentions such synonyms for vernacular as “primitive,” “folk,” “popular” and “spontaneous,”^{19} he does not build these into his framework, other than on an individual case basis. Therefore, his approach would appear better suited to the detailed study of types which evolve in a particular region, and less useful for discussing wider groups of examples on a comparative basis, in ways other than relating to the relative importance of material, societal and human factors.

**RAPOPORT: COMPARATIVE CONTINUUMS**

Amos Rapoport is, to our knowledge, the only one of the selected group of traditional-environment theorists who has
applied his framework specifically to informal settlement environments (although others do make passing reference). His starting point is that, "If vernacular design is defined properly, spontaneous settlements can be shown to be its closest contemporary equivalent." Rapoport, therefore, sets out to "initiate a discussion of the 'design quality' of spontaneous settlements. . . . The specific question posed here is: how successfully do spontaneous settlements respond to the cultural and aesthetic needs of their inhabitants?" This concern is similar to Lawrence's call to examine the design, use and meaning of dwellings.

Rapoport's definitions are difficult to restate succinctly, as they are based on "a polythetic classification with its corollary of multiple descriptors." He describes spontaneous settlements as "cultural landscapes" which represent the decisions of many individuals over long periods of time, but which are notable for adding up to "recognizable wholes." He lists numerous process and product characteristics which can be used to describe all traditional settlements. Examples of process characteristics include the identity and intentions of the designers, the reliance on a model with variations, the extent of sharing of single models, and the congruence of the chosen model with the ideals of the users. Product characteristics include degree of cultural and place specificity, specific models, plan forms and morphologies, use of specific materials, textures and colors, effectiveness of response to climate, and effectiveness of environment as a setting for life-style and activity systems. Rapoport devotes several of his process characteristics to the discussion of the presence of a shared model, a quality which Christopher Alexander has identified and articulated well in his various works, and which goes a long way toward explaining the visual coherence of many settlements. By expressing these qualities as situations of degree, Rapoport's framework of analysis presents a versatile descriptive tool, where tendencies within settlements and comparisons between groups of examples can be discussed. Using his lists of settlement qualities, he confronts characteristic tendencies in both vernacular and spontaneous environments.

In the discussion of formal qualities, Rapoport sets his discussion of spontaneous settlement between two environmental types: traditional vernacular settlements and professionally designed environments. His categorization of built environments is thus based on who the designers are, or, in his words, the "identity" of the designers — common people or academically trained professionals. He then asks: to which of the two environments are spontaneous settlements more comparable? For most of his listed characteristics the answer is obvious because of the extreme frame of reference he has chosen. In essence, the comparison takes place according to two ideals which rarely occur in their pure forms across the full range of product and process characteristics which he lists. The strength of the framework, however, is that it is comparative, allowing each informal settlement case to be examined for its likeness to the vernacular or the professional in each of the quality areas. His overall conclusion is very much the premise on which this paper is based, namely, "that for both process and product characteristics this exercise would place spontaneous settlements closer to traditional vernacular than to any other type of environment and farthest from professionally designed, or 'high-style,' environments."

However, where the approach seems to show weaknesses is in the way Rapoport himself uses it. In particular, his conclusion in the area of the aesthetics of informal settlements is less convincing. After citing certain examples of usually highly consolidated and established spontaneous settlements, he concludes that "spontaneous settlements are also often extremely successful in formal and perceptual (aesthetic) terms." This is puzzling given that perceptual quality is the characteristic least associated with informal settlements. In fact, addressing the "eyesore" accusation against such settlements has occupied apologists for many years. The solution which follows from this conclusion is therefore flawed in its motivation: that on the basis of their formal quality, such environments ought to be conserved and upgraded using "conservative surgery" rather than being demolished. The more common and, it seems, more reasonable motivation for upgrading informal settlements has been to allow the gradual improvement of housing over time, thus allowing people with very limited resources the time and flexibility to consolidate their housing and achieve certain formal qualities and gain access to improved infrastructure. Upgrading has rarely been motivated by a wish to conserve what is there on the merit of its aesthetics.

Where we can concur with Rapoport is in his conclusions that "spontaneous settlements are as worthy as traditional vernacular settlements of being evaluated on aesthetic grounds by designers"; that they "may well be the closest thing to vernacular we have today"; and that we should learn by analyzing such settlements. However, to conclude that what we will find after the proposed refocusing of the study will necessarily be positive, or in his words that "spontaneous settlements work well culturally and aesthetically, that is, in terms of some components of environmental quality," is both too general and premature given the extensive variety and lack of detailed empirical evidence about the built form of informal settlements.
OLIVER: AN EVOLUTIONIST VIEW OF PROGRESSIVE MYSTIFICATION

The approach adopted by Paul Oliver is similar to Rapoport's but places greater emphasis on the evolutionary development of the house-building process in different contexts. Where Rapoport talks about vernacular and professional environments as opposites, Oliver uses the words “tribal,” “folk” and “institutional” (among others), and links them together as stages in a progression toward the ever-increasing protection of knowledge (i.e., specialization). In fact, he addresses the subject of vernacular architecture in terms of the sharing of knowledge, “know-how,” or “technology” in the true sense of the word. Although Stea and Turan challenge this generalization, Oliver's conjecture is that in most traditional (especially “tribal”) societies, most, if not all, knowledge about building — conditions of climate, topography, natural hazard, materials, tools and methods — is part of the common domain. Using examples, Oliver charts the route from such a position where knowledge is accessible to all, to a position where in “folk” societies people increasingly mystify the knowledge of building through the specialization of certain tasks, which are then defended and perpetuated through such social compacts as crafts and guilds. The ultimate protection of knowledge, or “know-how,” takes place in “institutional” societies with professionalization and a judicial and legislative system designed to enforce it. This same process is described by Stea and Turan in their own terms.

Oliver is notable for discussing informal settlements and fitting them into his evolutionary framework: “Eventually, more elegant solutions to the problems of building in the city periphery will evolve, differentiation of skills may appear, know-how will be expanded and passed on to subsequent generations. With the possible growth of literacy, problem isolation and the conceptualising of solutions may become commonplace. But if it does, will the resultant forms of shelter still be ‘vernacular’?” By saying this, Oliver places spontaneous settlement at the extreme end of a scale of knowledge specialization, as the most unspecialized of types of settlement. This may be an overgeneralization. There is considerable evidence of the use of skilled labor and of small-scale contractors operating in informal settlements. For example, a study of informal settlements in Colombia found that only 29 percent of households were true “self-builders,” and that 54 percent of dwellings were constructed almost entirely by paid labor. Where “building” knowledge is rarely distinguished from “design” knowledge, this implies that knowledge is indeed concentrated and echoes a clear, if flexible, division of labor.

Oliver sees the activities in barriadas and favelas as “processes of emergent vernacular types” which will be refined over time. He then concludes with a plea that vernacular architecture not be studied in order simply to imitate it, but that it be recognized for its own merits where it occurs, and that efforts be directed to conserve it where appropriate. It is important to understand the vernacular, but not overlook its defects. Oliver's observations turn to suggestions of solutions when he says that local “know-how” has a major part to play in the contemporary urban context: “yet it is clear that there is a world shortage of housing, that the materials, the skills, the financial expenditure necessary to meet it by ‘modern’ means simply does not exist.” In saying this, he, like Turner, implies that the builders of informal settlements should be part of the answer to urban housing problems.

STEA AND TURAN: MODES OF PRODUCTION AND CONDITIONS OF EXISTENCE

In contrast to the above theorists, David Stea and Mete Turan focus on “placemaking.” Implicit in their use of this term is the idea of participation in the making of place, and it is therefore appropriate for the description of the informal-settlement formation process. Their concern is with the process of placemaking, the products of placemaking activity, and the use of places (or the “consumption of built form”). These concerns are similar to the areas of analysis used by Lawrence and Rapoport. However, their “statement on placemaking” has as its starting point a view of the varying modes of production operating within societies. Hence, their definition of placemaking is “as a form of economic activity, in its broadest sense, combining social, cultural, political, and material aspects of a society’s mode of production.” They define this latter concept as “a specific, historically occurring, set of social relations through which labour is deployed to create energy from nature by means of tools, skills, organisation, and knowledge.”

Using mode of production as a basis for analysis, their aim is to “improve our understanding of the domestic architecture and settlement patterns — ‘vernacular’ form — of traditional and transitional societies.” Their view is that “most of today’s societies are transitional and in the process of moving from one mode of production to another.” The clearly transitional condition of many informally housed societies makes theirs a particularly apt tool for analysis.

Skea and Turan have applied their ideas to the comparative study of traditional settlements, ancient and modern; but they also make passing reference to informal settlements in their 1990 work. Here they discuss settlements where spaces appear
disordered, and they offer two explanations. The first is that the observer may not understand, or may understand inadequately, the "underlying rules of order" operating within that settlement: "Thus the apparent 'messiness' surrounding a squatter dwelling . . . may actually be a 'stockpiling' system for building materials . . . ." The second reason for apparent spatial disorder "[may] result from a traumatic transition from one mode of production to another; the originally intended order may then give way to real disorder disrupting or destroying the place/activity dialectic. If a space is flexible and therefore partially controllable, however, a new order emerges."17

Oliver's view of informal settlements as a kind of nascent vernacular, where tradition eventually emerges over time, is remarkably similar to these ideas of Stea and Turan. The acknowledgment that the destruction of the "place/activity dialectic" can occur — or as Rapoport puts it, that "in some cases constraints may be more important than choice"18 — is a demonstration that these frameworks do have the strength to deal with situations in which, as Viviescas commented, imposed structural conditions subsume all personal attempts at participation.19

Srea and Turan employ a shorthand method of referring to context. For example, they use the phrase "conditions of existence": "A society's material conditions and its cultural conditions, taken together, are its conditions of existence." Such conditions break down into material conditions (including climate, siting, resources), and cultural conditions (including kinship, social and labor relations). Conditions of existence so defined 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."20

The approach of Stea and Turan is similar to Rapoport's in that they present ideals for comparison and then invite the reader to place specific cases on the continuum between the ideals. Where Rapoport uses the notion of societies as typically vernacular and typically professional, Stea and Turan start from the "primitive communist mode of production,"66 where people truly participate in the making of place. They then trace a development (similar to Oliver's evolutionary process) through increasing "stratification" of society, and "mystification," "professionalization" and "commodification" of the placemaking process, until they reach the totally commodified environment characteristic of the "Capitalist West," where places are received by exchange rather than made, and where people are products of the environment rather than vice-versa.67

The differences between the two modes of production are presented in a table comparing "shelter" with "property" as the "basic relationships in domestic architecture": for example, use value is contrasted with exchange value, and social identity is contrasted with individual/family identity.68 The qualities under the headings of "shelter" and "property" are presented as "politics" and not as "opposites," a framework designed to exclude atypical cases. Although the criticism leveled at Rapoport concerning the use of rarely occurring ideal situations as the frame of reference applies also to Stea and Turan, by presenting their ideas in terms of dialectics, they allow the description of tendencies in settlements, rather than forcing categories onto sometimes recalcitrant examples. This approach also avoids generalizations and simplifications and provides for the likelihood of change or transition in settlements over time. Significantly, Stea and Turan do not present their way of analysis as the antithesis of political-economy approaches, but rather offer the opportunity to incorporate such perspectives within a more holistic framework.44 An important element of Stea and Turan's work is their discussion of people-object relationships. They seek to move from a general "ecological" theory to a theory of "specific person-environment relations."66 They see the process of design and decision-making working in a certain way, viewing the house, or "the architectural object," as a product of the "art" of placemaking and "the act of building [as] a purposive action in which the achievement of ends and means is efficiently organised, and wherein decision procedures for choosing among alternatives are developed."66 The theme of decision-making emerges as especially important in situations where people act within the often severe constraints of resource limits.

R.R. Wilk's work on "The Built Environment and Consumer Decisions"67 also makes an important contribution to this subject, and any framework must incorporate the decision-making filter through which all places are made in situations where either choice or constraint may dominate in the different spheres of process and use. J. Kemeny has also proposed a framework which juxtaposes these relations between people and environment effectively.69

THE THEORISTS COMPARED

One initial observation that can be made about the work of the theorists reviewed above is that their frameworks are remarkably similar. Ever since theorists of vernacular environments moved away from viewing only the artifact, and reconcentrated their attention on the people in a society who shape the form, use the form, alter the form, and are shaped by the form, their frameworks have tended to arrive at descriptive typologies which rely on the kinds of societies creating the
environments, or (in the case of Stea and Turan) on the way in which such societies typically organize their labor.

Unlike the common approach used in much early vernacular study — where the artifact was first viewed, and then conclusions about the people were drawn from it — the investigation is now being initiated from the opposite direction. For example, Turan posed the following question in his book on vernacular architecture: “Should an understanding of the fundamental nature of man be derived from an analysis of the built environment? Or, should an evaluation of vernacular architecture in its totality be made within the framework of a theory of human nature?” Clearly, the answer depends on whether the artifact is extant and the society not (as in the case of archaeological examples), or whether information about the society is available in historical documents or from the people themselves (an opportunity presented to the researcher of contemporary informal settlements). It is not surprising, therefore, that frameworks are now centered on comparisons of the societies in which the forms of spontaneous settlements arise. The importance of the form itself has remained an element of vernacular frameworks, however, and it is precisely this strength that studies of informal settlement can recover if viewed properly as a type of vernacular. The tools for handling complexity in societies and in built environments are now available to researchers if this route is taken.

**REVISING OUR VIEW OF THE INFORMAL ARCHITECTURAL OBJECT**

The formulation of analytical frameworks which enable an accurate description and a more comprehensive understanding of a variety of types of built environment provides researchers with the challenge of taking the interpretation of informal settlements one stage further. A starting point must be the inclusion of such settlements within the broad family of vernacular architecture. However, there are a number of characteristics that qualify informal settlements as a special sub-type of vernacular, and which have delayed (and still cause opposition to) their entrance into the orbit of vernacular analysis. This partly arises out of the way vernacular studies have been done in the past, particularly the tendency to romanticize vernacular built form and generalize and overstate its appropriateness to certain physical and socio-cultural settings.

More valid objections to the inclusion of spontaneous settlements in the broader investigation of traditional environments might arise from the fact that informal settlements are usually located in (or juxtaposed with) manmade “institutional” or “professional” environments, rather than being located in natural environments. This situation allows a discussion of human culpability for the conditions that pertain. This has resulted in the targeting of structural and super-structural conditions as being to blame for the inadequate conditions, and in the refusal by many to admit the significance of personal choice in shaping responses to such conditions.

It is important to acknowledge differences in the nature of the “conditions of existence” (to use Stea and Turan’s term) experienced by the inhabitants of traditional vernacular dwellings and informal settlements. However, many archetypically vernacular examples have also been constructed in situations of extreme constraint of natural origin, often leading to praise for the way people have efficiently created appropriate forms in the face of adversity. The fact that urban informal settlements are constructed in situations of artificial constraint — as well, sometimes, as natural constraint (possibly as a result of intentional physical and social marginalization) — should lend as much interest to the study of these housing products as previously developed in circumstances of only natural constraint. The study of process should be no less thorough as a consequence; but even process cannot be understood properly considering the myopia that commonly characterizes views of the informal dwelling. Clearly, the directions in which solutions are sought to the problems which arise in natural and artificial settings will differ. But the product is no less worthy of study for being in a context with an artificial, or structural, dimension.

There are, of course, other differences in constraint. In contrast to the relatively stable context and slow Darwinian evolution of traditional vernacular environments, spontaneous settlements by definition have emerged and continue to expand in conditions of considerable instability and are often subject to uncertain rapid change. To use Stea and Turan’s term again, 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 classificatory framework.

We have argued that spontaneous settlement achieves its distinctive (if varied) identity by reference and contrast with the formal, institutional and legal parts of city. The critical importance of legal status as a factor of security of tenure was identified by Turner. He proposed a typology of settlements in terms of levels of physical development and degree of security of tenure, which included fourteen possible stages, ranging from transient and tentative to complete and legal. He believed that security of tenure was crucial to unlocking the creative energy and resources of the squatters, and in his
case studies from Peru he showed how over a period of years, dwellings and settlements consolidated when security of tenure was achievable. What is fascinating is that fully consolidated and legalized settlements can become indistinguishable over time from conventional formal residential neighborhoods, despite their contrasting development trajectories.

TOWARD A MULTIDIMENSIONAL FRAMEWORK

It is clear that unidimensional frameworks are unable to cope with the complexity and changing nature of such a broad universe, and this underlines the importance of comprehensive approaches. Using the ideas of Stea and Turan as a starting point, it is possible to construct a framework which expands the development levels of Turner and contains a series of layered continuums and the relationships between them. It should then be possible to locate the various characteristics of a particular dwelling (or groups of dwellings or settlements) at a point in time within this framework. If longitudinal data are available, it should further be possible to plot change over time. Key elements to consider in designing the framework would be the residents, or households; the dwelling and how it is used; the processes through which the dwellers shape it; and, perhaps most significantly, the context or setting in which these actions take place.

A simple diagram, while setting out to be neither definitive nor conclusive, is helpful in beginning to make these groupings clearer. It will become evident that we have developed this diagram based on certain of the concepts of the theorists previously reviewed. If we take as a starting point that the level of the study is the dwelling and the household (bearing in mind that these are located in the larger context of settlements and societies, and that such studies can be entered at other levels), the accompanying figure represents these elements and their interrelationships (FIG. 1).

In the majority of cases where people have shelter of some kind, the elements at the four “points” of the circle are coexistent through time. Process, on the other hand — including design, materials acquisition, and construction — happens, or assumes importance, for a family at distinct times in the dwelling’s life cycle (e.g., when creating, altering, or exchanging shelter). Process is the purposeful, modifying action of the household on the dwelling. As such, it has many qualities, one of which is the way labor is organized to carry it and other tasks out. Referred to by Stea and Turan as mode of production, this is different from “use,” which is the daily activity that takes place in and around the dwelling and can be defined as the “consumption of form.”

It is fundamental to this framework that decisions about and actions to the dwelling filter through the user or the user’s agent (the builder). Hence, when speaking of the setting of the dwelling, it is more proper to speak of the existential context, as filtered through the experience of the users. Where the users are closely involved in the “making of place,” or are participating directly in this process (as in many spontaneous environments), the household as facilitator of process is an especially important factor. “Existential context” is here equivalent to Stea and Turan’s “conditions of existence,” and includes the following: a household’s societal context, such as relations with various social groupings (or “mediating communities”), including family groups, neighborhood groupings, and labor associations, as well as the wider political and economic conditions of the society; and a household’s material conditions, including qualities of site and climate and the household’s access to resources.

“Households” described in terms of such qualities as the age, gender, opinions, beliefs and skills of members; “dwellings” with qualities of form, substance, function, meaning and locality; as well as how household members “use” their dwelling and the wider “context” in which they live should all be seen as part of an interrelated association which changes through time — gradually or rapidly, traditionally or perhaps traumatically. Environmental factors and use cause deterioration of the dwelling, and from time to time the users reshape the product, as they are undoubtedly shaped by it. Even in the most tenuous and constrained of circumstances these relationships exist and can be studied, not least in terms of how people in different places respond to adverse social and material contexts and how their built form might reflect such adverse conditions.

If the time dimension is added, each of the four main elements can be described as they change in relation to each other, and
their relationships and relative impacts on process and product can be discussed (FIG. 2). Using these concepts, this process and the changing product which accompanies it can be illustrated using examples. The whole picture can be captured where consolidation of the dwelling from an impermanent, initial shelter to a more established, consolidated house occurs.

To illustrate how the model above may be used, we now provide two examples from significantly contrasting existential contexts.

A LATIN AMERICAN SETTING:
SQUATTER SETTLEMENTS IN SANTA MARTA

The Colombian city of Santa Marta is a regional capital on the Caribbean coast, with an urban population approaching 211,000. A majority of the population live in settlements which began as organized illegal invasions of land, the first of which date from early this century. In Santa Marta land invasions appear to be tolerated, and at times encouraged, because powerful interest groups in the city benefit through unequal client-patronage relationships with the low-income settler populations. The accompanying photo shows an invasion settlement six months after initial occupation in 1991 (FIG. 3). Here the land was subdivided by settlers into equal plots following a conventional gridiron layout, with plots demarcated by simple post-and-wire fences. The invasion and layout were done collectively, but the improvised dwellings were constructed individually from the most accessible and cheapest source, offcuts from a nearby timber sawmill. Most such settlements are consolidated rapidly: within five years 80 percent of dwellings in a nearby settlement had at least one room constructed of permanent materials (usually handmade concrete blocks with asbestos-cement roof sheets).

In cases such as that of Santa Marta the main function of the improvised shelter in the early stages is to establish claim over the plot, and for those able to begin consolidation the shelter can be regarded as a builder’s hut. In some cases children and older people will remain in their previous place of residence (perhaps with relatives or in a rental unit) until the dwelling and infrastructure are upgraded. To illustrate how this process works, the dwelling in the foreground of the next photo of the settlement is occupied by a bus driver and his wife, who are both in their early thirties, and their three children (FIG. 4).
They managed to obtain two plots, and shortly plan to sell one to help finance the construction of a dwelling in permanent materials. They buy water from a water seller with a donkey cart, but obtain free electricity through illegal connections to the power lines on the main road. In addition to the single-room shelter, they have extended the roof to provide shade, as most daytime activities (cooking, washing, child care, etc.) take place outside. Although not visible in the picture, trees have been planted to provide both future shade and fruit.

Not all such residents of spontaneous settlements in Santa Marta are able to consolidate. Single women with dependent children, in particular, are rarely able to accumulate sufficient savings to buy permanent building materials. For example, Estella separated from her partner when their two children were small, and she and her children have lived in a single-room dwelling since she joined an invasion two years before the accompanying photo was taken (FIG. 5). The dwelling is built of timber and recycled asbestos sheeting, and measured less than 14 square meters. Despite the violence of the initial invasion and subsequent hardships, she is positive:

> My situation has improved because now I have what I didn’t have before — a house of my own. [Although] the work situation has got worse, I must thank God that I’ve got enough to eat. I came here to have something of my own [so] I feel very content here in my little house. You can live well in a house of wooden boards especially if it’s nicely kept, and I’m always doing something. I’m really so happy here: people ask me when am I going to rest from knocking in nails and things; but I am so delighted to be here: I’ve never had a house before!

Although the external appearance of the dwelling is rough and unattractive, its small internal space is carefully and thoughtfully arranged. Small shelves are filled with objects of personal significance, and selected pictures are hung on the walls. The space under the beds is used for storage, and many household activities take place outside.

In cities such as Santa Marta the change from improvised dwelling to fully consolidated dwelling usually takes many years, but in some cases it may be sped up if resources allow. For example, using capital accumulated in Venezuela, Vespaciano Mejia bought a large plot two years after the invasion and paid skilled laborers (from the same settlement) to do most of the construction work (FIG. 6). With one of his brothers, Vespaciano runs a motor mechanic workshop alongside the house, and frequently the house is full of produce that the family brings from the countryside in his vehicle for resale in the settlement. The house is home to thirteen people: Vespaciano, his wife, five children, four younger brothers, his mother, and a nephew. The house plan is typical of such settlements. It follows a shared typological model, which has been skillfully stepped to cope with a gently sloping site, and it includes distinctively curved walls between the dining and living areas. There are three bedrooms, a large central living room, a dining room, a kitchen, and a bathroom. Patterned curtains are used in doorways to provide visual privacy, but also to allow cross ventilation. All rooms are well furnished, painted, and tastefully decorated with religious and other pictures. In terms of space standards and quality of finishes, the house provides living conditions that are far superior to those in the few social housing projects that have been constructed in Santa Marta, and the house shares many features with dwellings in private, formal areas.

In contrast to squatter houses such as those illustrated above, private-sector houses in the city are usually architect-designed for a developer (who may also be the architect) and built by a contractor to conform to planning and building regulations (FIG. 7). Houses in spontaneous settlements are illegal and are built by a combination of self-help and paid labor (FIGS. 8, 9). Yet, despite the difference in pedigree and mode of production, the dwellings in Figures 7, 8 and 9 share numerous design features: all are surrounded by trees — partly for shade, but also for decoration (and in the squatter houses also for production of fruit and coconuts); all have recessed and stepped entrances that are centrally positioned with verandahs (incomplete in the case of the house in Figure 9); all have low pitched roofs with walls painted in pastel colors; and all have front areas that are sharply demarcated with low walls display-
ing a distinctive semicircular motif (the car tires in Figure 9 echo this motif and effectively carry out the desired function). The decorative railings in Figure 7 are also found in well-consolidated dwellings in squatter areas. A significant difference between formal and spontaneous dwellings is, however, the presence of garages and on-site parking in most formal housing areas, which reflects both life-style and income differentials.

AN AFRICAN SETTING:
SQUATTER SETTLEMENTS AROUND DURBAN

Built around a large, natural harbor on the country’s east coast, the Durban Functional Region (DFR) is South Africa’s second largest conurbation, with a population of approximately 3.8 million people. Sprawling, informal housing areas form a semicircular belt around the city some 20 kilometers from its center. Over 40 percent of the total population of the region (1.8 million people) live in these “free-standing” informal settlements. The city as a whole grew phenomenally in the 1970s: from 1 million people at the beginning of the decade, to 2 million by the end. One of the major complexes of informal settlement northwest of Durban is Greater Inanda. The 750,000 people presently living there have through the years been the subject of sporadic emergency responses by city authorities to the need for basic services.

Settlements in Inanda range from very early settlements like Amaoti, established before 1913, and those formed in the 1970s that have grown incrementally over the years, to those more recently formed by invasion, like the Bester’s Camp settlement (FIG. 10). A study of Bester’s Camp reported in 1993 that “Major settlement took place in the Bester’s Camp vicinity after the August 1985 upheavals in Inanda, largely through a series of land invasions that followed. The ‘greater Bester’s’ area has approximately 8,000 shacks which are home to around 60,000 people.” This area has since been the
Observation of the architectural objects in the settlements of Inanda reveals a number of common characteristics. Three major types of wall construction are employed: a) wattle-and-pole frame construction with sheet-material covering, including corrugated iron, plywood, or (in preliminary stages) plastic sheeting (FIG. 11); b) a more traditional method of wattle and daub (FIG. 12); and c) load-bearing concrete block (and sometimes mud brick). Most houses have corrugated iron roofs. The less permanent construction methods appear to be linked to earlier stages in the settlement process, and more permanent methods are indicative of more stable tenure and other “conditions of existence.” However, on observing the older, initially less dense settlements like Amaoti, one can see that more permanent consolidated houses are interspersed with more recent and impermanent dwellings (FIGS. 13, 14). Newer settlements, on the other hand, like Bester’s Camp, have a more homogenous, though impermanent profile. What is clear in this African example is that whole settlements of dwellings have not moved as quickly and generally towards consolidation as they have in the Colombian example.

There are a number of possible reasons for the slower pace of change around Durban. Historically, the threat of removal by city authorities has been a major consideration blocking households from more securely establishing their hold on the land. This condition began to diminish slightly after 1985, and more markedly since 1990. The way that the city and regional borders have been drawn by the authorities, imposing the “group areas” structure, has also had an impact by circumscribing the choice of living location. Not only this, but where in Santa Marta people could be seen settling the land with the aim of establishing permanent settlement, in South Africa the intentions and rationale are different. In Durban’s free-standing informal settlements almost half the people had lived in townships before moving to the settlement. The motivation for moving out of the often-overcrowded conditions in the townships was, for many people, the wish to start new households with the hope of eventually getting a formal house of their own. The remaining population of informal settlements are more recent in-migrants from rural areas — meaning that some settlements, especially Bester’s Camp, contained groupings with very different origins and traditions. The image of “transitional” societies is a useful one for this context. The strategy has been to live informally in order to acquire, or increase one’s chances of acquiring, formal housing later. This expectation has been heightened by the present prospect of a large-scale, national formal house-building initiative under the Mandela government. Such expectations have affected the form of houses and how people have been likely to apportion their effort and limited resources. A third possible set of explanations for the lack of consolidation has been proposed by theorists like Alan Mabin who have studied the long-term circular migration patterns of people in South Africa. The issue is clearly complex, and simplistic explanations are inappropriate.

With no wish to impute a value to Durban’s informal dwellings which their inhabitants would not share, it is possible to point out that, for their very impermanence, these dwellings are interesting in form and meaning. As in Santa Marta, the quality of interior decoration and furnishing (FIG. 15), and the care and delineation of areas surrounding the house (REFER TO FIG. 13) are regarded as very important. In a climate where corrugated iron houses are uncomfortably hot during the day, external space is used intensively (REFER TO FIG. 14). The rectilinear house form is most common, with the more traditional circular and dome forms being very rare. Given that approximately 69 percent of adults in Inanda settlements were born in rural areas, this is surprising, but it could reflect the practical requirements of accommodating furniture and the constraints of corrugated iron as a roofing material, as well as a wish to embrace a more urban way of life.

**CONCLUDING THOUGHTS**

The juxtaposition of informal and formal settlement in Durban reflects more than a successful search for land close to kin and the limited social amenities available. Among other things,
it may indicate an aspiration and a strategy towards acquiring formal shelter, or a long-term strategy for the survival of groupings of people who may be dispersed over wide areas. If the forms of older dwellings were tracked through the last decades, the continued impermanence of form would illustrate that the relationships charted in Figure 2 do not inevitably create a deterministic path toward consolidated housing. The path of the dwelling through time and the action of households in shaping their housing is not necessarily evolutionary in the sense of improvement toward some ideal. As has been implied, the reasons for this might be found both in the residents’ conditions of existence, where structural forces have (by purposeful action of authorities) kept the dwellings of the disavantaged impermanent, and in the strategies of households themselves. Without a framework capable of describing such dialectics, our picture would be incomplete.

Long-term living in conditions of impermanence and deprivation, where constraints dominate, as in the South African example, might suggest that meaning and cultural expression are manifested in unexpected and subtle ways. With only the partially informed view of the architectural object that presently characterizes the study of spontaneous settlements, it is not possible to understand how this might happen. Nor, we contend, is it even possible to properly understand process. In some places, a tradition of building skills does seem to emerge in settlements which may begin in the most tenuous and threatened of circumstances, and something recognizable as a “traditional” vernacular is born. It could be argued that where the path towards permanence is not taken, either by choice or because of constraint, or because of a mixture of the two, the strategies developed by people to survive such situations lead also to a type of vernacular, a language of building spoken by people excluded from the formalized, mystified language of the late-twentieth-century city. This is not to imply that the formal and informal are separate or independent in other spheres. In fact, just the opposite is most often the case: the formal can be heavily dependent on what the informal offers in terms of both labor and informal services, and the informal can be highly penetrated by formal interests.92

In contrast to South Africa, the institutional and economic constraints in the Santa Marta context are weaker, and the established informal housing process is both a recognized and apparently effective housing delivery system, tolerated and supported by official infrastructure upgrading projects.93 Unsuccessful land invasions and dwellings which do not eventually consolidate are the exception; hence, expectations of achieving adequate housing through this process are high, even though for the poorest and weakest the social costs can be


high. Relaxed constraints imply greater scope for choice. The exercise of such choice in housing has led to the adoption of shared models (typologies, selection of materials, sequence of construction, etc.), but within which considerable variation and individual expression takes place. Many of the observed variations reflect not only income differentials, but variations in household structure and life cycle, as well as different cultural values reflecting region of origin. All dwellings are identifiable and distinctive, particularly internally, although the settlements achieve a visual coherence through formalized street layouts, exuberant vegetation, as well as through a limited range of materials and single-story building heights.

If we refer again to Figure 2, which indicates transformation through time (from temporary towards consolidated dwellings in certain cases), it would be possible to add other characteristics: from single use to multiuse (e.g., toward incorporating income-generating activities such as shops, workshops, and subletting for rent); from low density to high density; from illegal to legal (if regularized); from absence of infrastructure to full infrastructure; and toward increasing use of specialist construction labor. Considerable changes of form accompany such changes and the increased complexity of use. For example, it is possible to observe a change from single-room dwellings to multiroom dwellings, with increased definition and hierarchy of spaces; and from temporary to permanent materials; from reliance on found, recycled and natural materials to increased use of industrially produced materials, frequently purchased from small-scale, informal-sector suppliers (e.g., cement, roofing sheets, sanitary appliances, etc.). This illustrates again the interrelationship between formal and informal goods and processes. It is also possible to observe a characteristic overlapping and interpenetration in housing forms, especially in the consolidation process when many of the forms and layouts characteristic of the formal sector are achieved slowly through incremental, informal means. But formal patterns can also be detected from the very beginning when the settlements are laid out and construction begins, even though the process of transformation may take decades, and in some cases may never be realized — at least not by the original settlers.

Spontaneous or 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, particularly as we have shown how in favorable circumstances the consolidation processes may be regarded as a gradual movement away from what are regarded as informal characteristics toward 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. This paper suggests that if we look for such expression, we will find it.

We have attempted to demonstrate why and how we must revise our view of spontaneous settlements and attach appropriate importance to the study of the built environment. When the housing object is restored to our analytical view, it allows us a fuller picture of the decision-making process of the inhabitants, with the full scope of possible influences which may have an effect on the shaping of that built form. Within this sharply focused picture, the dialectic of built form, environment and society can be discussed responsibly.

REFERENCE NOTES

1. There are numerous terms to describe the housing of the urban poor, but there is little agreement over definitions. In this paper we use "spontaneous" and "informal" interchangeably. "Self-help" is frequently synonymous with these terms, but it is also used to refer to state-sponsored projects with dweller involvement. "Squatter" will only be used in the specific cases where settlement occurs without permission, on land owned by others. We avoid terms such as "shanty" and "slum." For a discussion of definitions and terms, see A. Gilbert and J. Gugler, eds., Cities, Poverty and Development: Urbanisation in the Third World (Oxford: Oxford University Press, 1992), pp.121-23.


7. O. Lewis, Las Hijas de Sanchez: Autobiografias de una Familia Mexicana (Mexico: Editorial...
28. Oliver, Vernacular Know-How, pp. 158.
29. Oliver, Vernacular Know-How, pp. 158.
32. Oliver, Vernacular Know-How, p. 158.
33. Oliver, Vernacular Know-How, p. 158.
34. Oliver, Vernacular Know-How, p. 158.
35. Oliver, Vernacular Know-How, p. 158.
36. Oliver, Vernacular Know-How, p. 158.
37. Oliver, Vernacular Know-How, p. 158.
38. Oliver, Vernacular Know-How, p. 158.
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66. Oliver, Vernacular Know-How, p. 158.
67. Oliver, Vernacular Know-How, p. 158.
68. Oliver, Vernacular Know-How, p. 158.
69. Oliver, Vernacular Know-How, p. 158.
70. Oliver, Vernacular Know-How, p. 158.
successful vernacular architecture is a product of incorporating change into a pressing framework. This links to their idea of societies in transition.


73. The work of Kemery (Housing and Social Theory) is particularly significant.

74. Rapoport has listed them: Rapoport, "Spontaneous Settlement as Vernacular Design."

75. Stea and Turan, Planning, p.10.

76. This is where Lawrence's framework is slightly weak. He lists numerous aspects of context but underemphasizes that the builders and modifiers of form processed all of that context personally. Wilk's work on decision-making ("The Built Environment and Consumer Decisions") brings this process into focus.

77. See Stea and Turan's definition of "conditions of existence" above.


80. These relationships are explored in chapter 5 of Kellett, "Constructing Home."


83. A significant year with the introduction of the "1913 Land Act," which prevented African people owning land outside the Native Reserves of the time.


86. Urban Foundation, "Informal Housing, Part One," p.7. The word "township" refers to the formal residential areas built mainly in the late 1950s and early 1960s as part of the South African government's strategy to enforce separate living areas for different ethnic groups.

87. Ibid., p.10.

88. Tongaat Hulett, The Durban Functional Region: Planning for the 21st Century (Durban: Tongaat Hulett Properties, 1989), p.87. In a study of opinions of African residents in the DFR, owning a formal house was the highest aspiration of 31 percent of those interviewed. Other top priorities were having a job (26 percent), and having enough money (22 percent).

89. Merrifield, van Horen and Taylor, "Politics of Public Participation," found this a problem in seeking to establish community positions through participation for the purposes of their upgrading project.

90. Stea and Turan, Planning.


92. As described by Burgess, "Self-Help Housing Advocacy."
