

# INSTITUTIONALISED ARCHITECTURE, VERNACULAR ARCHITECTURE AND VERNACULARISM IN HISTORICAL PERSPECTIVE\*

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1. Vitruvius wrote his *de Architectura* in the first quarter of the 1st century A.D. The oldest existing manuscript dates from the 8th century. There are sixteen later medieval manuscripts in various European libraries. The first printed text appeared in Rome about 1486. From the 15th century onward there are translations in nearly every European language. *vide*. M.VITRUVIUS (P.), *on Architecture*, London: William Heinemann, 1955 (1931).

The Renaissance is the commonly accepted point of genesis for architectural theory and institutionalised professionalism in the field of building art. This acceptance, however, neither denies the existence of architecture *per se*, nor does it explain it solely within the context of binding rules drawn from the theory. Yet, the Renaissance concept of architecture and that of architect contain almost all of the institutionalised taxidermy from which the profession has suffered for so long. In this conception architect is the one who synthesises all related arts and sciences into one coherent complex of masses, volumes and ornaments while the rules guiding this discipline are considered as the 'true facts' of 'theory'.

As of the fifteenth century, a first century literary work on architecture, *de Architectura* of Marcus Vitruvius Pollio, found its widest field of application and became even more effective than in its own times<sup>1</sup> containing both the hard facts of engineering and the soft values of aesthetics. The Vitruvian trilogy, *commoditas-firmitas-venustas*, grew into the indisputable backbone of architectural theory and evaluation in the Renaissance. The revival of the Roman and, implicitly, Greek architectural canons has thus produced a medium for the conception of architectural theory as a body of set rules and orders having divine qualities to be obeyed. The classicism of Renaissance, depending heavily upon the reinterpretation of Vitruvian rules, persisted until modern times and formed the basis of institutionalised architecture as the opponent tradition of vernacularism.

2. The reference here is to *de re Aedificatore* of Leon Battista Alberti who lived from 1404 to 1472. His treatise, although based largely on the work of Vitruvius, reflects the author's own philosophy and his studies on Roman buildings.

L.B. ALBERTI, *Ten Books On Architecture*, London: Alec Tiranti, 1955(1485).

3. A. FILARETE (di A.), *Treatise on Architecture*, New Haven: Yale U. Press, 1965(1465)

4. Later, the religious explanation has taken different dimensions going as far as to singling it out as the primary cause of the dispute between man and nature. This view, which leads to some explanations in search for reasons of the current environmental crisis (Lynn White, Jr., *The Historical Roots of Our Ecological Crisis*, *Science*, v.155, 10 March 1967, pp.1203-1207), by itself is rather insufficient and simplistic against the very complex phenomenon of man-nature relations. It is true that Judea-Christian teleology has highly effected the view that man and nature are two separate things and that man is the master. It is also true that the Medieval thought of man and nature strengthened the belief that man, in God's image, dominates over nature and that all the elements of nature were created for man. However, in its historical perspective, factors such as the population growth and increasing affluence leading to more production, more consumption, greater use of natural resources and, consequently, more waste, the tendencies to load the costs and burdens of production onto the society in order to maximize the individual benefits, and the aggressive attitude toward nature inherited from the days when nature appeared as a series of hindrances to man's survival are all part of the complex phenomenon of environmental exploitation. The historical, cultural and psychological nature of exploitation clearly dismisses the attempts to explain environmental crisis as resulting from a single, solitary factor as the primary cause. (Lewis W. Moncrief, *The Cultural Basis for Our Environmental Crisis*, *Science*, v.170, 30 October 1970, pp.508-512.)

Needless to say, no matter what the reasons may be, the overall tendency of exploitation manifested itself also in the field of architecture. Perhaps it is less visible in architecture than in other domains of life such as mining, industry, etc. The impact, however, is no smaller. When viewed in a broader spectrum architecture, especially in the post-industrial period, is one of the major contributors to the fouling of the environment.

5. M.A.P. LAUGIER, *Essai sur l'Architecture*, Paris: Duchesne Libraire, 1975.

6. B.B. VIOLLET-LE-DUC, *The Habitations of Man in All Ages*, Ann Arbor: Gryphon, 1976(1971).

(*Historie de l'habitation humaine*, Paris: V. Hetzel et Cie., 1875)

The seeds of vernacularism, however, were sown even earlier than the first treatises in the Vitruvian tradition.<sup>2</sup> In his *Trattato*<sup>3</sup>, Antonio Filarete di Averlino manifested the basic principles of architecture and town-planning in the form of a monologue presented to Lord Sforza and, instead of resorting to the canonic conception of the built form and its attributed symbolic values, explained the beginnings of architecture in terms of the conceivable essentials of shelter to survive, taking a common religious background belief as the point of departure. He argued that when Adam was expelled from Eden it was the first encounter of man with the inhospitable nature and that the series of actions Adam must have taken in order to protect himself formed the genesis of architecture.<sup>4</sup> (Figures 1-4)

Nevertheless, the spark lit by Filarete was to be left in oblivion by the overcasting dogmatic application of classical canons and orders of the Greek and Roman world in the following centuries. It was not before the Age of Reason that the relevance of the antique orders as the sole basis for architectural theory was radically questioned for the first time. In doing this, Marc Antoine Laugier purified architecture of all the canonic attributes and other aesthetic judgements projected from dogmas, beliefs, schools, etc. Yet, he was still able to find beauty in this purified substance. He called it '*beaute primitif*' and illustrated it in the frontispiece for his *Essai sur l'Architecture*.<sup>5</sup> (Figure 5).

The next eminent architectural theorist to recognise vernacular architecture within the context of architectural theory was the very prolific Eugene Emmanuel Viollet le Duc of the nineteenth century. His *Habitations of Man in All Ages*<sup>6</sup> is probably the first ever dealing with vernacular architecture in its own right albeit under the heading of 'architecture' *per se*. (Figures 6 and 7)

While Viollet le Duc paid due attention to vernacular architecture, other prominent theorists of the time either ignored it completely or discriminated it heavily. Ruskin, for instance, curtly differentiated between 'building' and 'architecture' and, implicitly, associated architecture with symbolic values and monumentality, disregarding the total tradition of architecture which has evolved through considerations of comfort, function, climate, etc.<sup>7</sup> James Fergusson, among many others, also limited himself with the understanding of architecture as "nothing more or less than the art of ornamental and ornamented construction".<sup>8</sup>

In comparison with his contemporaries, the value of le Duc's contribution- however speculative, inaccurate and even misleading it may seem in parts- is two-fold. First, he brings a more thorough consideration of architecture within the context of social, cultural and geographic factors, Second, he develops a totally new frame of reference and a different vocabulary in analysing and expressing 'habitations' instead of applying the already established and, in this respect, irrelevant terms of evaluation.

7. Ruskin's famous statement that "ornamentation is the principal part of architecture", quoted by N. Pevsner in his opening remark to the well known *Pioneers of Modern Design*, has new interpretations quite different from what has been taken for until recently. John Unrau for one, in his *Looking at Architecture with Ruskin* (Toronto: University of Toronto Press, 1978) argues that Ruskin uses the term 'ornament' in much broader sense than is usually realised. Ornament can be, for instance, any major subdivision of a structure provided that it is viewed from an appropriate distance. Whatever the current revival of intellectual climate of Ruskinian aesthetics may bring forth, Ruskin's influence on the critics of architecture has been strong and mainly oriented in a particular direction.

8. J. Ferguson, *History of Architecture in All Countries*, London: John Murray, 1884.

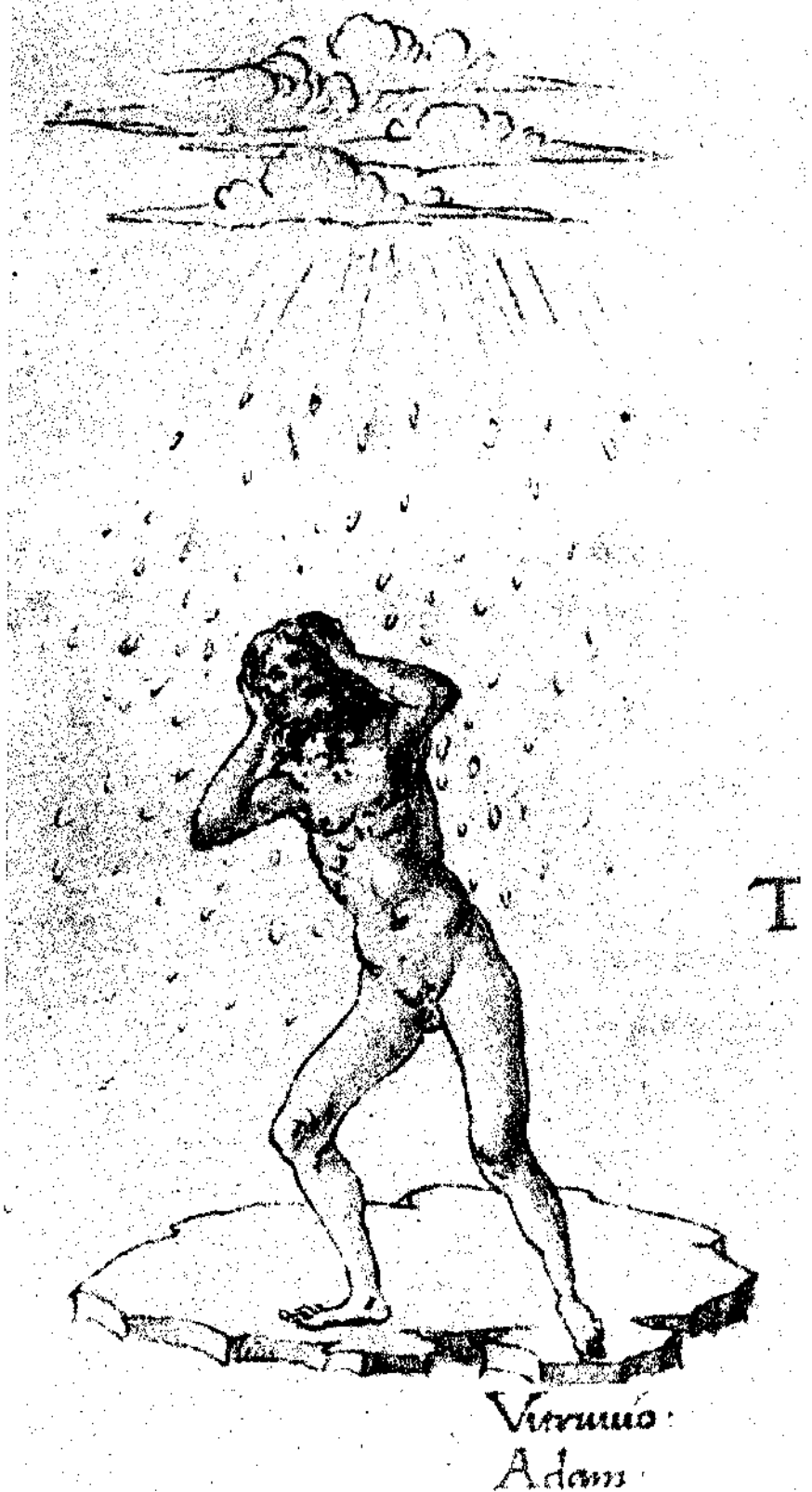


Figure 1. (A.P.) FILARETE (di A.), *Trattado di Architettura*, (1465), J.R.SEPENCER, ed., *Filarete's Treatise on Architecture*, New Haven: Yale University Press, 1965. Book I, fol.4.v. "... when Adam was driven out of Paradise, it was raining. Since he had nothing else at hand to cover (himself), he put his hands over his head to protect himself from the rain."



Figure 2. and 3. (A.P.) FILARETE (di A.), *Trattato di Architettura*, (1465), Book I, fol.5.v. "Just as he instinctively put his hands over his hand, so was he able to break branches and in the same way cut them in pieces bit by bit and then stick them into the earth and make a shelter."

9. The term 'vernacular', derived from the Latin *vernaculus*, meaning 'native', is generally defined as the language or dialect that is indigenous to a region or country. It was first used in reference to building activities in 1861 by Reverend J.L. Petit who told his audience at a lecture that if they were to look at the best monumental buildings of Queen Anne's reign (1702-1714) they would find them well-designed because they were simply 'vernacular buildings', harmonizing with the character of houses built by people with consideration of their own requirements, the state of society, climate and materials. 'Vernacular architecture' was thus defined, for the first time, as the basis of a living architecture and was given a place in architectural theory. It is also argued that Petit's notion of vernacular architecture may have been inspired by Sir Gilbert Scott (1881-1878) who discussed even earlier, in 1858, the relationship between 'vernacular domestic architecture' and the ecclesiastical architecture of the nineteenth century. (See P. Collins, *Changing Ideals in Modern Architecture*, London: Faber and Faber, 1965, pp.122-123)

The line of development, initiated by Filarete, in comprehending the rudimentary aspects of architecture has thus acquired its proper vernacular context by the works of Viollet le Duc.<sup>9</sup> However, attitudes to the contrary, i.e. differentiating 'architecture' from the rest of the built environment, still prevail. Perhaps the most exuberant manifestations of the dichotomy of 'architecture' versus 'building' has been that of Nikolaus Pevsner who maintained that "a bicycle shed is building; Lincoln Cathedral is a piece of architecture".<sup>10</sup> He has further stated that "... nearly everything that encloses space on a scale sufficient for a human being to move in is a building; the term architecture applies only to buildings designed with a view to aesthetic appeal".<sup>11</sup>

It is easy to see that this stems, to a large extent, from the western notion of history "... which tended to be presented exclusively as political history - a record of maneuvers, of kings, statesmen, soldiers and religious teachers, of wars and persecutions, of the growth of political institutions and ecclesiastical systems"<sup>12</sup> rather than that of the 'ordinary people' who comprise the multitude of population everywhere.

What has not been equally easy to realise is that as one consequence of the dichotomy of architecture versus building an overwhelming majority of the built environment has so far been neglected and overlooked. 'Buildings' which are not works of architects and, therefore, not meriting the term 'architecture' have not been given a place in the training programmes of the schools of architecture. Apart from the occasional, rough estimates as to their possible proportion to the total building stock around the world, a successful and yielding approach for studying, analysing and evaluating vernacular buildings is yet to be developed.<sup>13</sup>

The said dichotomy is also readily observable in the field of conservation, restoration and preservation in which high-style buildings have, for a long time, been given



10. N. Pevsner, *An Outline of European Architecture*, Harmondsworth: Penguin Books, Ltd., 1963(1943), p.15.

11. N. Pevsner, *An Outline of European Architecture*, Harmondsworth: Penguin Books, Ltd., 1963(1943), p.15.

12. G.V. Childe, *Man Makes Himself*, New York: New American Library, 1951(1936), p.12.

13. One should however refer with due esteem to works of R.A. Cordingley, R.W. Brumskill, Bernard Rudofsky, Amos Rapoport, Paul Oliver, in this respect.

utmost priority. The 'more modest works' were considered merely as complimentary settings and curtilages of or as a backdrop to 'monuments proper', so that the glory of the latter could be appreciated more fully. However, it is not only the misled value judgements that have caused this but also the concept of property rights as well as the understanding that the 'house' one may own has ultimately greater market and exchange value than its somewhat intangible merits. This has especially been the case when planning decisions resulted in speculative earnings over increased property values. In the resulting chaotic world of progress and development the publicly owned 'monuments' have had a slightly better chance of survival whereas a great number of buildings in private ownership have often been lost to 'renewals'.

It is therefore promising that in the architectural media of recent decades vernacularism has been gaining a new significance. This is due as much to the inherent didactic potential and use-value of the vernacular architecture as to the deficiencies observed in the current idealist architectural theory.

One major body of theoretical efforts in the architectural media may be classified as *pragmatic*, entrusting the essential set of decisions, customarily expected from the architect, to the users themselves. Self-help architecture, adhocism, democratisation, participationism, geometric minimalism, mass-productionism and vernacularism are approaches that share the intention of limiting the architects' former decisive authority. It is argued that the area conceived so far as the architect's realm of decision-making is to be liberated and replaced by the participation of people in the process of shaping their own environment.

Vernacularism deserves special attention among these various lines of thinking. Theoretically, it refers to the reality of a living environment and therefore its deductions are conspicuous. It also refers to a building

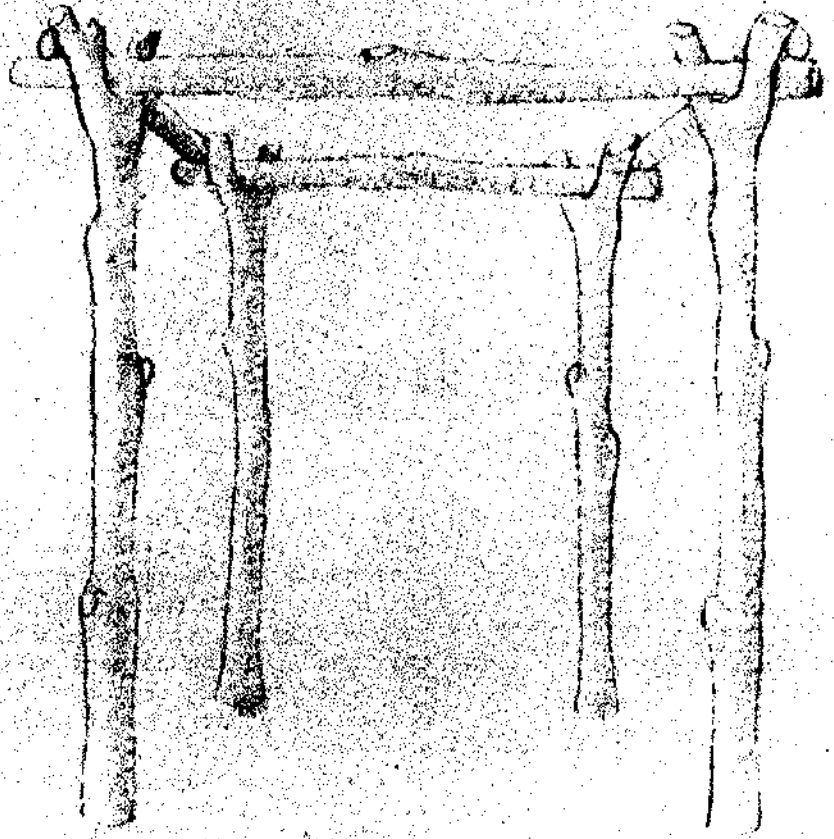


Figure 4. (A.P.) FILARETE (di A.),  
Trattato di Architettura,  
(1465), Book VII, fol. 54, v.  
"be trimmed of all the others  
and the two left made a fork.  
When four was made in this  
form and driven into the  
earth, he put four other  
pieces of wood across them..."

14. T. Maldonado, in his memorable lecture at Brussels World Fair, spoke for anonymity in design with some political semantic categorisations as he was protesting against "aesthetical prostitution" and "neo-academicism." He said: "neo-academicism is a right wing aestheticism, and for but few people, 'rare flowers'; styling is a left wing aestheticism, an aesthetic for many people, 'wild flowers'. The metaphor is doubtless pleasing, but I hold that the new tasks of the designer will have nothing to do with artistic horticulture, be it from the left or from the right. The majority of the objects exhibited in the museums, and in the art exhibitions of 'good design', are anonymous and often executed in technical offices by subordinate employees who never imagined that they were producing art. In return, the greatest honors of contemporary industry have been executed in the name of beauty and art." T. MALDONADO, *New Developments in Industry and the Training of Designers, Architect's Yearbook 9*, ed. T. Dannatt, London: Elek Books, 1960, p.176.

process which ensures success. However, what vernacularism draws from vernacular architecture is a *post facto* theorization in that it mainly confines itself to finding out "how it has happened" as opposed to formulating "what must be done". It apparently describes the process but offers little in the way of coping with the problems of the contemporary society. Hence, as the pragmatic content of vernacular architecture is displaced by the descriptive content of *post facto* theorizations the didactic value of the vernacular increases while its pragmatic value remains obscure. To one's disappointment, vernacularism is gradually becoming an extremely profound theoretical involvement whereas vernacular architecture stays a modest occupation.

The ideological implications of vernacularism are no less significant. It was in 1958 when Tomas Maldonado first touched upon the idea of the "aesthetics of plenty"<sup>14</sup>. His was a distinction between the right and left-wing aesthetic concepts. Objects belonging to the former category were qualified by the use of adjectives like "rare", "noble", "distinct", "single", while the latter category sufficed with adjectives referring to the



Figure 5. (M.A.) P. LAUGIER, *Essai sur l'Architecture*, Paris: Dushesne Libraire, 1975, frontispiece, "Beauté Primitif"

aspects of being many. Both possessed aesthetic qualities to be found beautiful but Maldonado promoted the latter. He called these "wild flowers" as opposed to the "rare flowers" of the former category. With this analogy Maldonado was pointing to the industrialised production in order to correct the prevailing attitude of associating beauty with rarity. To transpose his analogy onto vernacular and institutionalised architecture one could simply consider vernacular architecture within the scope of left-wing aesthetics. This judgement owes its reasoning to such aspects of vernacular architecture as being plenty, need-oriented, active, well-adapted, homogenous, etc., all of which are attributes that the institutionalised architecture has suffered from the lack of for centuries.

If architecture is "the special method or style in accordance with which the details of structure and ornamentation of a building are arranged",<sup>15</sup> is it then the lack of that 'special method' or 'style' that separates architecture from building? This distinction alone brings out the major drawback of the available

15. The Compact Edition of the Oxford English Dictionary, 2 vols. New York: Oxford University Press, V.1. p.109, 1971.

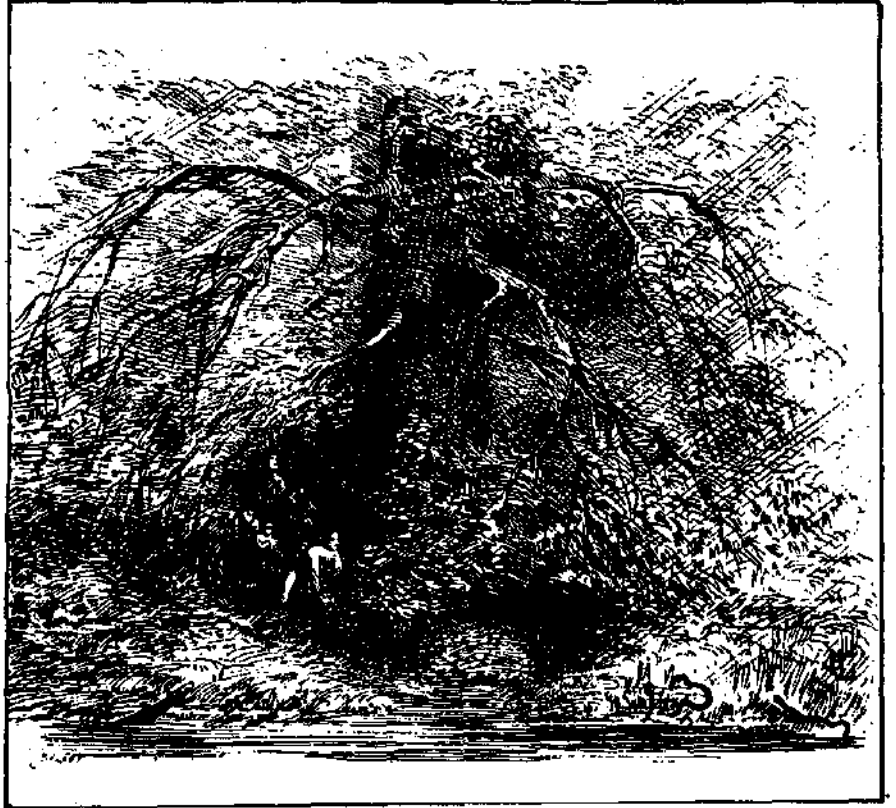


Figure 6. The First Shelter, E.(E.)  
 VIOLET-LE-DUC, *The Habitations  
 of Man in All Ages*, Tr. B.  
 Bucknall, Ann Arbor, Mich:  
 Gryphon Books, 1971 (1876).  
 p.5.

theory and institutionalised practice of architecture in that its normative characteristics, constituting a meta-language, inescapably impose a linear process and, as such, exclude the issues inherent in the dialectical nature of the vernacular.

#### DIALECTICAL NATURE OF VERNACULAR ARCHITECTURE

The dialectical nature of the vernacular architecture is characterised by four major points:

- . experiential value
- . participation
- . environmental adequacy
- . intended meaning

#### *experiential value*

Experiential value of the vernacular architecture is the productive outcome of man's many generations of direct involvement with the environment. From the earliest, primitive stages until the relatively recent industrial and technological advances there has been an evolutionary process of development in man-environment relations which have changed, often with abrupt divorces, from direct to indirect, from dialectical to linear. The most important single factor in this change has been the rise of professionalism, i.e. the emergence of a more specialised group of people assuming the sole responsibility of shaping the environment on behalf of and without the





Figure 7. The First Hut. E.(R.) VIOLETTE-DUC, *The Habitations of Man in All Ages*, Tr. E. Bucknall, Ann Arbor, Mich: Gryphon Books, 1971 (1876).p.6.

involvement of others. Until the rise of professionalism, although there have often been specialists of some sort, centuries of direct contact with the nature had taught man how to deal with the environment and to be yet a part of it. Despite its potential to make life better and less difficult, the Industrial Revolution with all its elaborate professionalism has so far created serious problems within the system of production and of the distribution of wealth. Fitch describes this very succinctly as:

Industrial civilization, through mass production, has made material plenty a reality for mankind for the first time in history. It has, by the same process, robbed all of us of the first hand knowledge even of how the tools of daily life are made or how they work. It has correspondingly

16. J.M. Fitch, *Architecture and the Aesthetics of Plenty*, New York: Columbia University Press, 1961, p.269.

crippled our ability to evaluate critically their practical or aesthetic value. It has made the citizen into an ignorant consumer, the designer into an isolated, powerless specialist.<sup>16</sup>

Alienation in man-environment relations, as a result of a broader social estrangement gave itself to two basic states of control; i.e. states of overcontrol and states of undercontrol. Connected with the first, highly inflexible environments, problems of identity, modern ideas of efficiency and demand for conformity emerged as critical issues. The latter, on the other hand, refers to problems such as lack of realism and question of isolation manifested mainly in the extramural environments.

Both the states of overcontrol and under control are forms of alienation which result from the lack of direct experience with the nature and with the environment. Furthermore, it is not only these problems that threaten people living in urban areas shaped by the specialised professionals but also that the dialectical nature of the feed-back mechanism, existing in the case of direct experience with the environment, has changed into a strictly linear process through the alteration of the man-made environment to being an end-object in itself.

#### *participation*

17. A. Rapoport, *House Form and Culture*, Englewood Cliffs, N.J.: Prentice Hall, 1969, p.6.

The second major point, participation, is in a way an extension of direct involvement with the environment in that the shaping of a socially accepted and individually satisfying environment requires a certain level of participation a- among people, b- with the natural phenomena. The result is the tradition which was "... the force of a law honoured by everyone through collective assent".<sup>17</sup> The unwritten laws on respecting other people's environmental rights are one outcome of participation. Even a broader respect is observed for the total environment handled within the structural hierarchy of a given settlement. This leads not to expediency but to gratifying, engaging and prepossessing environments. Needless to say, the value system more or less devoid of speculative purposes and the absence of acute population problems were highly effective in the operational aspects of such an environmental disposition.

An interesting example to illustrate this would be the common case of the use of the relatively scarce resource such as water. In Gaziantep of Southeastern Turkey, as in many other countries e.g. Iran and Morocco, the main water supply system is the traditional canal network which circulates through the settlement, passing from courtyard to courtyard where it is collected in individual pools. Everyone uses the water from the private pool in his own courtyard. It is indeed an unwritten law to pay utmost attention not to profane the water in your pool for it will then keep on flowing into someone else's pool in another courtyard. (Figure 8)

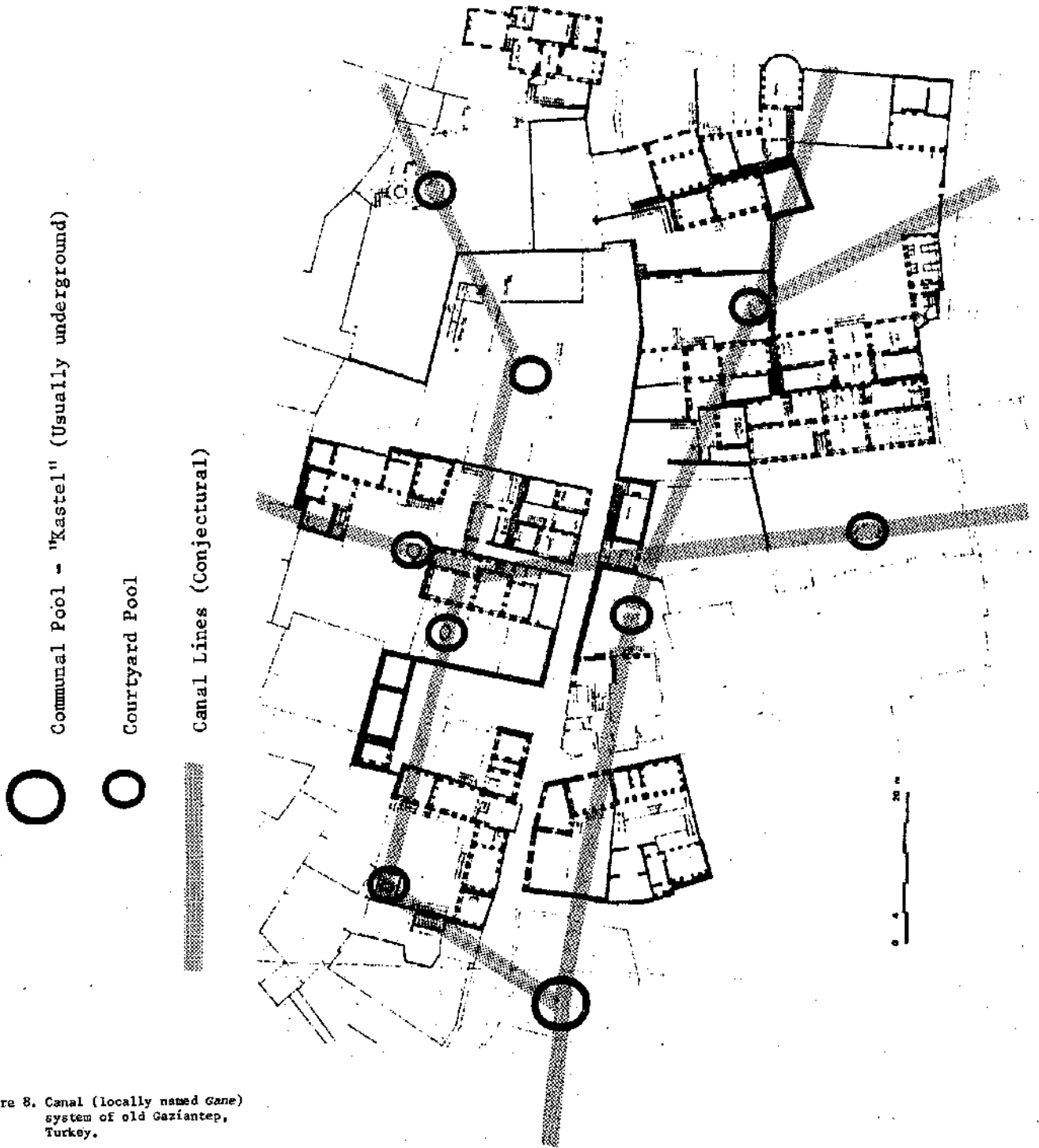


Figure 8. Canal (locally named *Gane*) system of old Gaziantep, Turkey.

Participation with the natural phenomena also grew out of centuries of intimate experience with the environment which resulted in the practical use of the environment without causing much harm in its natural qualities. Although the early man may not be as innocent in his exploitation of the natural environment as some would like to think he was, the relative harmony between man and his environment can be better traced in the environments he created.

Depending essentially on the periodic chains on the Biosphere almost all functional features or support systems in human cultures are sustained in the form of cycles. The periods of these cycles are fundamentally determined by the processes that produce them. In rural settlements, as an effect of the "openness" or "closedness" of the community, as far as required inputs to maintain the system is concerned, the community is classified to be self-supporting or dependant.

The cycles to support any rural community can be outlined as the cycles of water, food and various forms of energy. Apart from these physical chains there can be many other cycles having direct or indirect relationships with the other processes needed for the survival of the community as an integrated system.

In most of the traditional agrarian cultures almost all of these cycles are completed within the geographic and social context of those communities themselves. At instances when the cycles are completed with considerable inputs from outside the communal boundaries, the cycles are observed to be broken thus become intermittent. The intermittences bring new objects and sources into the system. As a consequence of these, various physical and cultural deformities are experienced as foreign issues.<sup>18</sup>

Indeed, with the recent influx to urban centres and the subsequent population accumulation therein, the canal system in Gaziantep has fallen into disuse owing partly to the emerging indifference to the necessary respect to other people's environmental rights and partly due to the introduction of so-called modern replacements for the water supply.

Another experience illustrating the case of broken cycles is recorded in ancient Cappadocia, Central Anatolia, where people traditionally raise pigeons for their droppings which were used extensively as fertiliser in local vineyards. The cotes are carved into the natural rock in a distinctive pattern and the practice, over centuries, has effected the physical environment considerably. (Figure 9) The introduction of chemical fertilisers coupled with the lower pricing of the grape produce, however, has severed the traditional cycle. As a result the pigeons have gone, the cotes are left unattended and have therefore eroded, vineyards have been turned into grain fields or apricot orchards.

18. The natural cycles and vernacular architecture along with certain aspects of vernacular technology were studied and documented in R. PLUNZ and S. ÖZKAN, *Houses on the Aegean*, New York: Praeger, (Forthcoming) and A. MEDJOLI, S. ÖZKAN, R. PLUNZ, *The Grain Cycle and Windmill at a Village on the Aegean*, M.S.T.U. *Journal of the Faculty of Architecture*, vol.3, n.1, Spring 1977, pp.39-62 from which the quotation was taken.



Figure 9. Dovecotes in Cappadocia,  
Central Anatolia.

Concrete as a building material, introduced from without, has also resulted in the breaking of cycles in Cappadocia where it is now being freely used as a replacement of former, traditional earth roofs. In the peculiar landscape of the area, the earth roofs provided the almost only flat surfaces for spreading and drying raisins. Further, the thermal properties of earth as roof covering were such that it not only yielded better raisings but also acted as a very satisfactory insulation against heat and cold. Concrete replacements, on the other hand, although requiring relatively less maintenance, burn the raisins and render the houses unbearably hot in summer and impossible to warm in the harsh Anatolian winter.

Contrary to certain easily broken cycles, more permanent natural phenomena of recurring kind such as the sun-earth geometry and its utilisation in terms of energy conservation may be found in many vernacular examples and is not peculiar to any one culture. Similar approaches under similar conditions are manifested in many examples from diverse cultures of the Fertile Crescent, China or, for that matter, the Indian settlements of North America. One very common aspect of all these various environments is the wide-spread consideration of passive design elements, i.e. the orientation, choice and employment of materials, ratio of solids to voids on surfaces, surface/volume ratios and utilisation of slopes. Through the use of the passive design elements the examples of vernacular

19. R.A. Rappaport, *Nature, Culture and Ecological Anthropology, Man, Culture and Society*, Edited by H.L. Shapiro, Revised Edition; London: Oxford University Press, 1971(1956), pp.237-267 (p.246); on the same subject, studies are numerous and from different perspectives; a philosopher's view parallel to the above mentioned dialectical process is worth mentioning: N. Hızır, *Kültürlü İnsan ya da Total İnsan, Köken*, v.1, n.1, pp.2-5.

20. M. Turan, "Environmental Stress: An Ecological Approach With Special Reference to Housing", unpublished Doctoral Dissertation, Columbia University, New York, 1974, p.101.

21. R. Knowles, *Energy and Form: An Ecological Approach to Urban Growth*, Cambridge, Mass.: MIT Press, 1974, p.45.

architecture in these areas exhibit another aspect that is common to all, regardless of cultural differences, in that they show an endlessly adaptive attitude to existing environmental conditions. Adaptation to nature, however, does not necessarily mean that culture is determined by environmental conditions alone. It would in fact be a gross misconception to maintain that the physical, environmental elements are the sole determinants of a culture.<sup>19</sup> Through adaptive activity man creates new demands from the nature and new demands also from his own self. Thus a dialectical relation between man and nature continues with new solutions, in accordance with the dynamic qualities of the total adaptation process, resulting in a definite adaptive aspect of vernacular architecture which is best observed through the use of above-mentioned passive design elements. The user and, indeed, the maker of the vernacular architecture learns in this direct experience with nature that he cannot afford to be wasteful, nor can he afford to be extravagant to the extent of profusion. His only choice lies in learning to coexist with the total environment, not in dominating it, but in living and functioning in harmony with the elements of the nature. "There is hardly a natural environment in which human life could be perpetuated had not man developed an adaptation to the constantly changing forces of this habitat."<sup>20</sup> The two major forms of adaptation, i.e. 'exploitation' in the case of sedentary people and 'relocation' in the case of migratory bands clearly exhibit the exigency of participation which sets the precedence for a harmonious relation between man and his nature. The dialectical nature of this relation, when reflected in man's environmental activities as in the vernacular examples, forms the basis of a concordantly adaptable exchange between architecture and the natural environment. Further research into this pending, if one looks at the exchange, or balance, between architecture and the natural environment from a somewhat restricted angle, for instance in terms of the overall energy budget of vernacular settlements, one sees that the minimal amount of energy input utilised to maintain comfort conditions is one significant indicator of this. Such a performance depends, naturally, not only on the correct choice of building materials and a particular geometric form but also on the observance of daily and seasonal cycles as well as of other natural patterns involved. It cannot be achieved without the full participation with natural phenomena.

Knowles, in his study of the relation between architectural form and energy in indigenous buildings of the southwestern U.S.A., concludes that builders and occupants of settlements such as the Longhouse - Mesa Verde, Acoma, Pueblo Bonito - Chaco Canyon all reached an "essential degree of stability"<sup>21</sup> in their environments. All three settlements open primarily to south, demonstrate a remarkable orientation of settlements which, in addition to the material used in buildings, make them efficient energy systems. In winter months

they receive and store energy during the day with a considerably high efficiency profile, which is carried through the colder nights, reradiating the stored heat to the interiors. In summer solstice the profile of these settlements of the hot-arid region is low enough to mitigate seasonal variations.

In the sun-belt region of the Anatolian peninsula where environmental conditions are quite similar to those of the southwestern U.S.A., the slope settlements facing southwest show comparable characteristics. Mardin, an outstanding example of settlements on the slope dating back to 3000 B.C displays a notable energy feature: a settlement of the same size on a plane requires 50 per cent more energy than Mardin to maintain the same energy balance.<sup>22</sup> Furthermore, to attain the same energy level as a slope facing south, a settlement on the flat plane requires an area twice as large.<sup>23</sup> In the example of Mardin, similar to the examples in Knowles' studies, a close relation between architecture and the natural environment is established through full participation with the elements such as topography, orientation, earth-sun geometry and wind patterns. The relation is furthered by the proper selection and use of materials, form and relevant ratios.

In Alanya, south-southwestern Turkey where different environmental conditions prevail, the traditional settlement is on a rocky peninsula rising sharply to 260 meters from the sea-level and overlooking wide and sandy beaches on either side, i.e. east and west. The relatively flat land atop the peninsula once accommodated a sparse community dispersed among orchards and protected by a hefty fortification. For the subsequent urban development in the 18th and 19th centuries, however, the sharply sloping eastern half of the peninsula was preferred. (Figure 10) The eastern slopes were adequately shaded in the afternoon by the upper reaches, had a more agreeable view and received a good deal of the cooling breeze from the east. (Figure 11)

The circulation was provided by a network of roads running parallel to contour lines. The slope was negotiated by stepped cross-roads and the ground was treated in the form of a series of terraces on which the houses were built with entrances from the terrace at lower level, from the road at the back, or from both. (Figure 12)

The heavy stone masonry of lower floors acted as retaining for the roads and the spaces within were used for services or as cool storage areas with minimum of openings. The upper levels, on the other hand, were constructed of lighter materials, i.e. laths on studs, usually plastered, which allowed the breeze to keep the interior sufficiently cool in the humid summer heat. (Figure 13)

The openings of the upper floors were provided with clever timber shutters which help control the amount of light and heat entering the house. Under the eaves and in

22. M. Turan, *Architectural and Environmental Adaptation in Slope Settlements, 1978*; (In a forthcoming book edited by G. Golony).

23. M. Turan, *Vernacular Architecture and Environmental Influences: An Analytical and Comparative Study*, *M.E.T.U. Journal of the Faculty of Architecture*, v.1, n.2, 1975, pp.227-246.

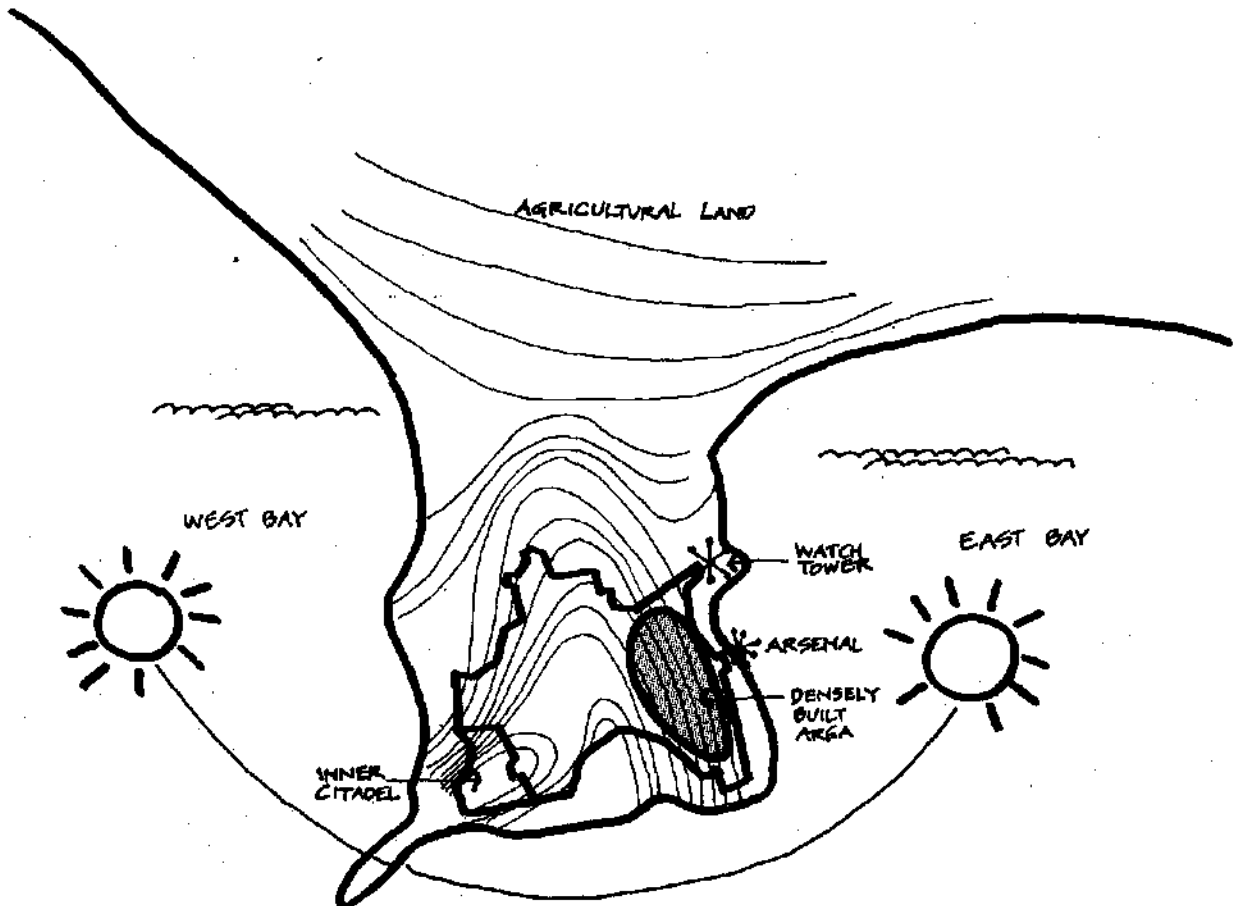


Figure 10. Alanya, schematic plan, not to scale.

the shade of the overhang, there were usually smaller, auxiliary windows ensuring proper ventilation when shutters were closed. (Figure 14)

The western slope receives a much greater amount of sunshine throughout the day, especially in the afternoon, and was therefore suitable for growing mulberry trees the leaves of which were traditionally used for feeding silkworms. The tradition of silk weaving still lingers on within the community.

These examples and, undoubtedly, many others around the world reveal that people under given environmental, technical and societal limits strive to create the most suitable living conditions in accordance with nature. In the course of time, they achieve different energy systems that tend "... to equalise internal energy profiles over the extremes of season and day".<sup>24</sup> The evidence is convincing that the solutions cannot be accidental or coincidental and it is very difficult to attribute the established particularities within the framework of man-nature relations to mere chance.

24. R. Knowles, *Energy and Form: An Ecological Approach to Urban Growth*, Cambridge, Mass.: MIT Press, 1974, p.31.



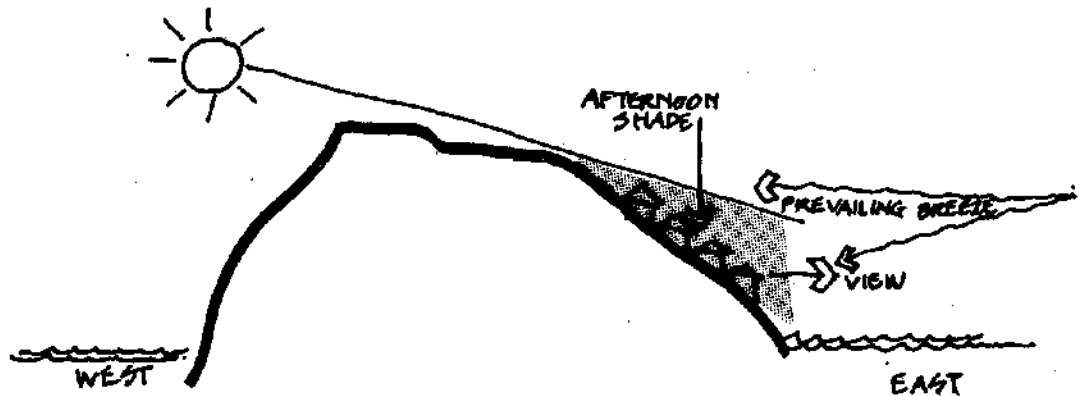


Figure 11. Alanya, schematic section, not to scale.

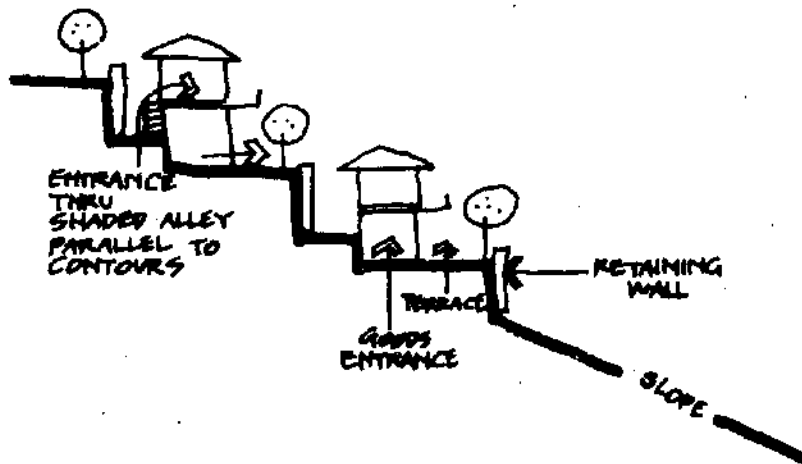


Figure 12. Alanya, housing layout, section, not to scale.

*environmental adequacy*

The third point is the environmental adequacy in vernacular architecture. There are three important issues related:

- . flexible environment
- . identity
- . economy

As opposed to the states of overcontrol and undercontrol which prevail in institutionalised architecture, vernacular buildings exhibit a certain degree of environmental adequacy i.e. provision for the dynamic characteristics of life activity giving the individual possibilities of controlling, manipulating and altering his immediate surroundings. What is more, environments that do not allow for or accommodate anything beyond an extramural experience, manifested in the states of undercontrol, are surmounted again by environmental adequacy. This results in the evolution of highly flexible environments of the vernacular instead of the "captive environments"<sup>25</sup> of the imposing and authoritarian produce of the institutionalised architecture and eliminates feelings of alienation and powerlessness.

25. C. Perin, *With Man in Mind*, Cambridge, Mass.: MIT Press, 1970, p.43.

26. See T. Hubka, *Just Folks Designing*, *Journal of Architectural Education*, v. XXXII, n.3, Feb.1979, pp.27-29.

27. A. Lipman, *The Architectural Belief System and Social Behavior*, *The British Journal of Sociology*, v.20, n.2, 1969.

28. E. Mandel, *The Marxist Theory of Alienation*, in E. Mandel and G. Novack, *The Marxist Theory of Alienation*, New York: Pathfinder Press, 1970, p.23.

29. T. Hubka, *Just Folks Designing*, *Journal of Architectural Education*, v. XXXII, n.3, Feb.1979.

30. J.M. Fitch, *Architecture and the Esthetics of Plenty*, New York: Columbia University Press, 1961; especially see: pp.14-23, 227-264.

The second issue, identity, may be stated as the identification of the problem or the problem solving approach which discerns the problem at hand. In the case of the vernacular, the designer is not separated from those for whom he is designing.<sup>26</sup> Since a personal patronage is assumed, the dilemma which "impels architects", as in the case of institutionalised architecture, "to emphasize their social engineering claims in attempts to counter the imbalance between their ideal self-image and the actual situation"<sup>27</sup> is not created. Therefore, the problem of identity which emerges as another aspect of the state of powerlessness does not appear in the vernacular for there is a direct contact and communication between the so-called designer and the inhabitant. The "alienation of the capacity to communicate"<sup>28</sup> which prevails in institutionalised architecture as a result of the fact that the architect deals not with the actual tenant as decision-maker but with the legal client, is diminished. Thus, not only in the decision stages but also later the inhabitant finds a chance to express his identity. In spite of the widespread commonality in most cases of the vernacular the nuances applied either on the surface treatments or as decorative objects are still sufficient for self-expression. Whatever the theoretical considerations, vernacular builder produces through concrete situations rather than abstractions,<sup>29</sup> reflecting the true needs of the inhabitants. Realisation, therefore, does not lead to a differentiation between what is intended and what is actually built and, consequently, the user of the vernacular building does not have to conform to an environment imposed on him from without.

Every culture and era in history had its own economic and technological limitations. While technology is an undeniable source of potential, its utilisation and applications, primarily in the field of institutionalised architecture, do not ordinarily go beyond a search for minimum dimensions assuming that efficiency and economy are the prime goals in man-environment relations. This brings about the third issue of environmental adequacy, i.e. economy, or, as better stated by J.M. Fitch, the economy of scarcity.<sup>30</sup> Vernacular architecture which has to operate often under conditions of the economy of scarcity has usually produced more successful environments of every scale around the globe.

Economy here should be considered in terms of the total building process, material-wise, construction-wise, etc., and also in terms of the valid standards of use-value and exchange-value. From the point of view of the building process, it is easy to reinstate the merits of even the dilapidated vernacular examples but under the conditions of market economy the difference between the use-value and exchange-value of the vernacular buildings usually works to their disadvantage.

At this point it may be useful to introduce a discussion on the difference also between the technical life and economical life of buildings. In many a country buildings

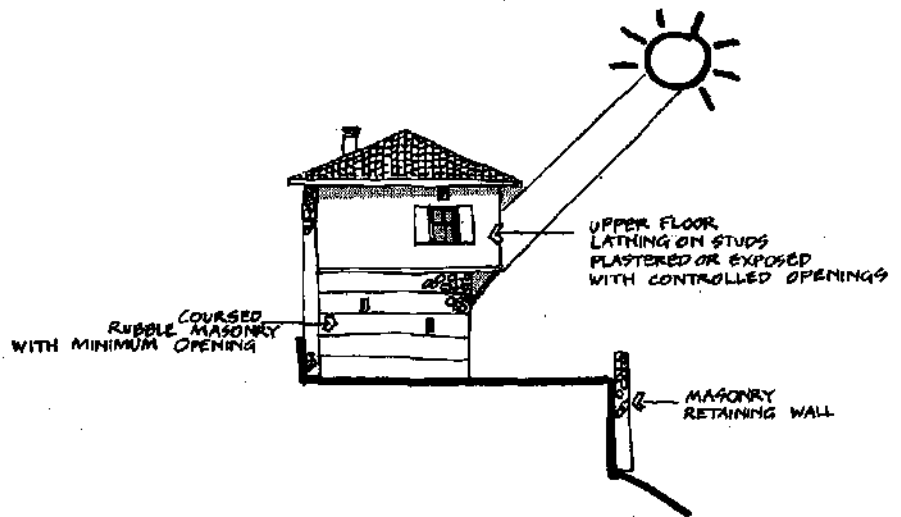


Figure 13. Alanya, typical features of houses, not to scale.

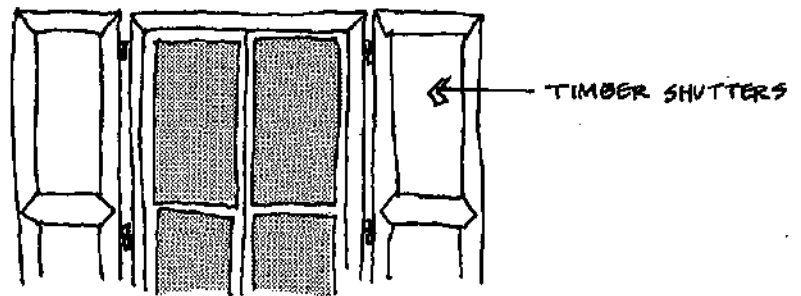
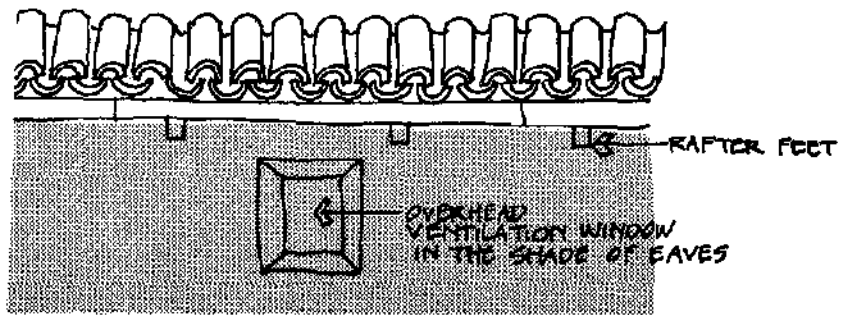


Figure 14. Alanya, specific details, not to scale.

are erected to last for an average of not more than ten years of economic life whereas their technical life is ultimately longer than that. There is, therefore, an obvious waste in architectural production today. The institutionalised architecture, because it lends itself to be dictated by the conditions of the market economy, may very properly be termed as a 'throw-away architecture' which is obviously incompatible even with the economic means of the developed countries, let alone the developing ones which should keep operating on the basis of the economy of scarcity.

The picture is rendered even more complicated when factors such as social acceptability, maintenance, environmental aesthetics, and energy consumption, not only of individual buildings but also of the whole

community, are considered. Yet most of these have for a long time been overlooked, to say the least, in fields of economics and institutionalised architecture and dismissed lazily as being "intangible". The inclusion of these and other qualitative and even what may easily be termed subjective factors will raise serious doubts about the true economics of the institutionalised architecture.

Other than economics a concern for realism and social interaction, related to the environmental adequacy, is also manifested in the vernacular. The vital links between life activity and the building production, starting from the inception, are adequately bridged. Neither the human meaning of reality is allowed to exist in the immediacy of appearances nor the reality of man devoid of any meaning is permitted to be reflected in the environment. Likewise, this type of attitude does not let object-oriented and impersonal designs at town level or at the residential level reduce the social individual. In other words, the human significance from a social point of view is emphasized and given due attention in the formation of the vernacular architecture.

*intended meaning*

Realism mentioned above should not be taken as a mere copy of reality. It reflects the activity which is inherent in reality and it means participating in the creation of an environment which is in constant process of formation and change. Realism in the design process is the equivalent of environmental adequacy. This is achieved when the whole building process aims at comprehending the dialectical complexity of man rather than merely being the graphic embodiment of disconnected and loose triviality and shallowness. This type of realism exists in the vernacular and forms one of its essential characteristics that differentiates it from the institutionalised architecture. The vernacular environment as an outcome of such a relation refers to something in which the human needs are emphasized in the design elements and the execution of the design is significantly human. The very essence of the concept of environmental adequacy then lies in the unity of idea and material realisation. This, obviously, requires interconnections between meaning and value which have their roots in human needs. The reality experienced by an individual is not a mere collection of elemental facts. It consists of units in which no part exists by itself. Experiential behaviour assumes that the individual experiences the environment not as facts and significance belonging to two different realms but in an "intrinsically coherent whole".<sup>31</sup> Thus the experienced behaviour, therefore the experiential value, becomes meaningful through insight which can also be described as "direct awareness of determination".<sup>32</sup> It is only after environmental adequacy has been achieved, that one can refer to it as 'meaningful'. And this requires an interpretation of the situation that is experienced. One's actions or behavior becomes intentional when values influence one's choice of alternatives. In other words, there is an

31. K. Koffka, *Principles of Gestalt Psychology*, New York: Harcourt, Brace and World, 1935, p.176.

32. K. Kohler, *Gestalt Psychology*, New York: The New American Library, 1947, p.200.

interconnection between measuring and the value system which consists of social attachments and cultural products. The interdependence of the symbol milieu and the physical milieu can be understood through these value systems. It is through the mutual act of both milieu that the environment offers rich possibilities of identification and becomes meaningful.

The total conception of meaning emerges from consciousness, retrospection and the historical social process. A close examination of each aspect shows the importance of cognitive meaning. Consciousness develops in the life-course of an individual and in his interaction with the environment. The accumulation of knowledge about the environment, consequently the comprehension of the environmental complexities and their principles of organisation evolve spontaneously. Spontaneity here implies two major groups of phenomena:

- 1- submissiveness to overcontrolled environment;
- 2- resentment towards the situation and a desire to eliminate the immediate source of disturbance. In either case, the individual realises that environment external to him does not exist independent of him.

Everyday experience is not something to be taken at face value by the individual. Environment exist with reference to a certain past experience and the knowledge acquired pertaining thereto. Therefore it is up to the individual's mental awareness to judge how the unity will be interpreted through those combined elements. The environmental unity is in a process of continual change and transformation. This is 'retrospection' and it has a temporal as well as a spatial quality which leads to the meaningfulness of a particular environmental interaction.

Consciousness starts merely with the awareness of the immediate sensuous environment and the limited human contact with this. In the historical-social process as the consciousness develops it starts reflecting the social being - a phenomenon depicted as the material life of the society. To satisfy his needs, man, while recreating his environment and producing material goods, is sharing his experience with other people. Out of this shared experience develops social ideas, views and sentiments which constitute the base of social consciousness. The relationship between social being and social consciousness is significant in understanding the development of the total conception of meaning.

Intended meaning emanates from a purposive activity that is oriented towards the assessment of the environmental conditions through direct contact with the environment. As a result of direct experience the product is given a meaning by the individual. Through this process man's evaluation and interpretation of the environment leading to a meaning are based on his concrete relations with it. There is an intended meaning attached to the object prior to its materialisation and this includes the interpretation of the individual.

Attributed meaning, on the other hand, lacks the personal assessment of the individual. No matter how objectively the purposive activity is set, as long as it lacks the subjectivity of the individual, someone else's intended meaning is an attributed meaning for the individual.

It is the intended meaning that provides richness to the environment in the vernacular and that expresses the complexity of life activities without forced simplifications and/or reductions. Furthermore, it can be argued that active participation in place of passive observance and mere utilisation is closer to the nature of the process of consciousness. Not only more meaningful environments are thus produced but also alienation, both as a result of and the reason behind passivity, is escaped from even though it may not be eliminated in toto. Man's alienation from his environment prevents him from appreciating the environment as a whole but forces the individual to sharpen his sphere of attention on mere utility.

#### VERNACULARISM IN ARCHITECTURE: A BLEAK OR A HOPEFUL FUTURE?

Professionalism in architecture and building has set for itself conscious standards of accuracy, honesty, precision, verification, aesthetics, etc., aimed undoubtedly at serving the client better. The result, however, has been that it has thus also divorced itself from the people and from the society. In the process, layman became the client, producer became the consumer and the product, i.e. the dwelling, became a commodity. These standards have also brought along a meta-language which often disregarded, ignored and even ridiculed the self-built vernacular, causing a further break-up.

As opposed to the meta-language of professionalism, vernacular designers and/or builders manipulate their own standards through 'mental-language' which defines the folk designer/builder's rules of competence.<sup>33</sup> Theirs are very probably equally conscious standards of accuracy, honesty, precision, verification, aesthetics etc., to which the scholars of the so-called high-style architecture have customarily been utterly indifferent.

By no means a mere romantic interest in, or a nostalgia for a long-neglected phenomenon, research and studies on vernacular architecture are in fact criticisms of the fact that architecture *per se*, in its development along the lines of professionalism and institutionalism, has been gradually alienated from its very context or subject matter. Hence, it is no longer clearly comprehensible how much scientific truth the architect of this time and age really seeks.

Studies on vernacular architecture or on a more correctly formulated vernacularism in architecture may usefully provide solutions to some of the problems that face architecture and the society today. It would, however, be very misleading to hope that total reversion is a magic cure to be prescribed.

33. Henry Glassie, *Folk Housing in Middle Virginia*, Knoxville, Tenn.: The University of Tennessee Press, 1975, as referred to by Thomas Hubka, *Just Folks Designing*, *Journal of Architectural Education*, vol. XXXII, n. 3 (Feb. 1979) p. 28, f. 6.

The term 'mental-language' is also considered by Hubka to be an architectural scheme structure or ideas abstracted far beyond representation.

At this point there are several questions which may be helpful in formulating the desired correct vernacularism in architecture as well as in doing justice to the vernacular architecture in all parts of the world. These questions and, obviously, others that may be added to the list, will also guide the much needed research and future studies on various aspects of vernacular architecture:

. At what point is the term 'architect' more justifiable as opposed to mere 'builder'?

. If a vernacular builder makes fuller use of his technological means and media in terms of materials, structural notions, user participation, standardisation, comfort, flexibility, aesthetic considerations and expression, identity, economy, etc., is he not even better entitled to qualify as an architect?

. What are the traditions and standards of vernacular architecture and how are these related to the people and the society?

. Are there no rules or guiding principles of design in vernacular architecture?

. Is vernacular architecture universally unselfconscious?

. Is vernacular architecture a simple process of inefficient self-building or is there indeed any specialisation involved? If there is, is it probably a specific form of professionalism in itself?

. What would be the future of vernacular architecture? How does it relate to situations in specifically the third-world countries where the housing shortage is critical?

. What would be the new division of labour, as it were, between the institutionalised architecture and the vernacular in coping with the demands and problems of today and tomorrow? How would the two cooperate and ensure a useful mutual feedback mechanism?

Presently it falls to academic institutions to dwell into such questions in a very broad context. After all, institutionalism in architecture has partly been bred in institutions of training and education. If it needs to be rectified, the task and responsibility should again be entrusted to the same.

## KURUMSALLAŞMIŞ MİMARLIK, YÖRESEL MİMARLIK VE MİMARLIKTA YÖRESELÇİLİK

### ÖZET

Geleneksel olarak eski Yunan ve Roma mimarlıklarının kural, biçim ve düzgülerine dayandırılan kurumsallaşmış mimarlık kuram ve uygulamalarının başlangıcı 15. yüzyıla, Rönesans'a tarihlenir. Kurumsallaşmış mimarlığın

dışladığı yöresel mimarlık kuşkusuz çok daha eski. Bu yazıda, kurumsallaşmış mimarlık kavramları ve değer yargıları dışında bırakılmış yöresel mimarlık çeşitli açılardan inceleniyor. Yöresel mimarlık, kurumsallaşmış mimarlık ve mimarlıkta yöreselcilik (*vernacularism*) konuları bir bakıma yeniden yorumlanıyor, yöresel mimarlık ürünlerinin eğitsel, ekinsel ve akçasal değerleri irdeleniyor.

Yüzyıllarca sürmüş bir yapı-yapıt ayırımını doğuran kesin ön yargılarıyla kurumsallaşmış mimarlık, özünde bir üst-dil oluşturmakta ve geliştirdiği çizgisel süreç içinde sürekli yabancılaşmakta. Oysa yöresel mimarlık eytişimsel bir sürecin ürünü. Bu özellik,

- . deneysel
- . uyumsal
- . katılımsal
- . anlamsal

boyutlarda gözlenebiliyor. Deneysellik, insanoglunun doğa ile çağlar boyu dolaysız etkileşim içinde olmasından; katılım, bu etkileşim sonucunda a) insan-doğa arasında, b) bireyler arasında verimli bir saygı ve birliktelik yaratılmasından; uyum, bu saygı ve birlikteliğin ürünü olan esnek, kişilikli, tutarlı ve tutumlu çevre birimleri içindeki sağlıklı yaşamdan; anlamsallık ise sonuçta ortaya çıkan ürünle kişi ve toplumların beklenti ve değer yargıları arasındaki ilişkiden kaynaklanıyor.

Yöresel mimarlık ve mimarlıkta yöreselcilik, bu açılardan günümüz mimarlığının tüm bunalmalarını çözecek sihirli bir araç ya da kurumsal mimarlık dışındaki ürünlere duyulan abartılmış bir beğeni değil, ama varlığı ve yararlılığı yadsınamayacak bir olgu olarak nitelenmelidir.

Bunun ve yapılması gereken çalışmaların sorumluluğu ise hiç değilse şimdilik eğitim kuruluşlarına düşüyor.

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