Andrew Rabeneck Reviews:
A PATTERN LANGUAGE

There is much to admire in the recently published work of Alexander and his collaborators. The pattern language offered by them is a major statement about how to overcome what is probably the key problem in the social act of building.

That is, the ever-widening gulf between two sets of ideas. One set is inherited from the past and governs how the whole process of building is organised, how it is controlled, and what is actually built. It is the set of ideas which describes 'the way things are and the way things are done'.

The other set of ideas, constantly evolving, governs what we feel and think about buildings and places, what we expect of them or hope for them. One set of ideas speaks the language of solutions and the other the language of needs. Because they don't understand each other, we live in a Babel which can be illustrated by riddles such as 'how much hospital makes good health care?' 'how much school a good learning experience?', or even 'how much house a fruitful home life?' *Hospital, school* and *house* are ciphers for the current dominant conventional solutions, while *health care, learning experience* and *home life* are ciphers for an emerging perception of human needs which challenges current solutions.

Alexander shares with many, myself included, the view that there is a serious and growing unbalance between solutions and needs. The set of solutions on offer through builders, designers, owners and regulatory bodies does not embrace the set of needs as building users, Alexander and others perceive them.

Until quite recently perception of needs and aspirations within affluent materialistic societies (where design theorists flourish) tended to be in terms of quantity, relief from archaic building forms and processes or 'more for less'. The emphasis in research was on expanding the set of solutions through technology. Hence the early 1960s preoccupation with systems and industrialised building.

But plans, programmes, and systems take time to develop and get into operation. They are perpetually threatened by proliferating variety and change in the system of needs.[1]

How to plan, given the dynamic nature of change, traditional organisational structures and conventional methods of coping with problems, becomes an increasingly important issue, even as technical constraints to meeting social objectives diminish in importance as determinants of planning strategy. No longer can we hold up technical constraints as the reason for failing to meet social goals. As Stafford Beer puts it:

'For the first time in the history of man science can do whatever can be exactly specified. Then, also for the first time, we do not have to be scientists to understand what can be done. It follows that we are no longer at the mercy of a technocracy which alone can tell us what to do. Our job is to start specifying'.[2]

Programmes and plans, then, should be based on measurable social goals defined with respect to an accurate perception of the evolving field of needs and aspirations. But because needs evolve continuously, planning too, needs to be continuous and adaptive. Plans should continuously abort, and be recast, before they give birth to a monster. If this is true, there is no need to base them on the predictions that no one can make in any case, but only on the analysis of an unfolding situation in which every decision constrains future variety. In that statement the unpopular notion of planning (in which institutions grind on towards the implementation of plans long after it has become obvious to those who will be affected that the plans are inappropriate) is turned on its head, and deserves to become popular again; because it means that the future is something we use our freedom to determine, rather than something that is lurking 'out there', and will happen to us unless we are mighty smart. *We can make, rather than prophesy, the future.*[3]

During the 1960s, besides the successes of technology, there were many spectacular failures of attempted technological solutions to human problems, from Vietnam to Pruitt-Igoe.

Consequently, in recent years researchers have paid increasing attention to the understanding or interpretation of human experience as a guide to finding ways of restoring equilibrium. Previously, one might say, needs were taken for granted and solutions studied, whereas the present tendency is to examine needs and take the repertoire of technical means for granted.

Now, Alexander is one of the few who have never accepted this switch in concern from means to ends. He has steadfastly tried to keep both in view. He seeks both to restructure our understanding of human experience and to prescribe building solutions. His concept of a pattern language is a device for achieving this, and it is a brilliant device. It is the first self-conscious expression of something that has eluded most scholars and teachers of planning and architecture. It is an account of the factors that contribute to pleasurable and painful experience of buildings and places, and it offers practical advice on how to repeat pleasurable experience and avoid painful experience in the future.

To this extent alone, *A Pattern Language,* and the case study *The Oregon Experiment,* are wonderful teaching tools. They succeed better than almost any other texts in capturing the essence of good design (that is, a plan which when executed will lead to desired effects while avoiding undesired side or after effects). The patterns succeed in transfusing, to some extent, the indeterminate component of the good designers' make-up, the architectural equivalent of the doctor's 'bedside manner', the advocate's 'legal mind', or the joiner's 'craft' — elements which are notoriously difficult to communicate.

Yet despite my sympathy and admiration for the book, I disagree strongly with the partisan conceptual framework and the methodological programme adopted by Alexander and his colleagues, as I understand them from the presently published volumes. I fear that they present insurmountable obstacles to the widespread adoption of pattern languages, and to the development of the idea beyond the status of a theoretical curiosity (despite the fact that several buildings have been built using *A Pattern Language* as a guide).

It would be premature to voice detailed criticism of the concepts and methods underlying the series of books until *A Timeless Way of Building* finally appears, since that volume deals with the philosophical underpinnings of *A Pattern Language.* Yet the volumes that have already appeared are clear enough about the general dispositions of the authors to deserve some comment.

My purpose is not to criticise individual patterns. The authors are quite scrupulous in pointing out that the patterns offered are no more than hypotheses in which they have varying degrees of faith. Users of *A Pattern Language* should feel free to add, subtract and adapt patterns to suit their particular circumstance. No, it is more important, I feel, to draw attention to some of what appear to be *a priori* assumptions underlying the Language as presently formulated and its present applications.

Each building act, whether individual or collective, confronts its initiator with a degree of uncertainty. Design is a way of avoiding the risks of real-world trial and error in overcoming uncertainty. Design has many strategies for doing this which have evolved over long periods of time. The first is the strategy of imitation or copying of past forms that have been proved successful. The premise is the repeatability of experience, and the technique is replication, as discussed by George Kubler in his 1962 essay 'The Shape of Time', and by Alexander in his remarks on unselfconscious building activity in *Notes on the Synthesis of Form* (1964).

The second strategy is that of rules systems (eg, the Classical orders) in which by copying parts of buildings rather than whole buildings a range of end products can be generated with sufficient certainty, thus coping with social and technical change. It is the need for judicious use of the rules that gives rise to architecture as we know it.

The third strategy, that which dominates today's normal building activity, is the strategy of explicit prediction. As increasingly rapid social and technical change have caused the collapse of rule systems, and as building science and engineering evolve, three things happen to the act of design:

1 Analysis of needs replaces accepted conventions of need;
2 Invention of forms replaces conventions of form;
3 Instruction of the builder in how to build replaces dependence on craft conventions.

It is the consequence of contemporary over-reliance on the strategy of explicit prediction that

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Alexander and his colleagues attack in their work. They argue for the peaceful co-existence of all three strategies under a meta-rule system which they have devised. They seek to re-discover a basis for incorporating pleasurable experiences in design, and for avoiding the nastiness of much modern development. They invent a whole urban rule system to govern land use, density, transportation, and so on. Their niche for the strategy of explicit prediction is the extraordinary building technology they advocate. The irony of this particular section is that quite bizarre forms, certainly with little precedent in California or anywhere else, are proposed on the basis of strictly functionalist arguments (mostly related to statics). As such, they need detailed explication since they are invented – are beyond the experience of any user. Thus they must rely on explicit prediction.

My argument with Alexander is based on the fact that he is not content to proceed towards his objectives (many of which I share) from where we actually are, but from where an idealised knowledge base would have us be. His is a rationalistic and total vision. In the pursuit of the benign goal of de-brutalising and harmonising building and planning, Alexander and his colleagues have created a totalitarian moral framework into which their prescriptions slot so neatly.

For example, an important assertion is that most of the wonderful places in the world were not made by architects but by the people. As a consequence Alexander and his collaborators believe that the new equilibrium between needs and solutions will not be found unless all people in society are involved in making towns and buildings; unless those people share a common pattern language within which to make these buildings; and unless this common pattern language is alive itself;

This plea for a communal ethic as a prerequisite for towns and buildings that are 'alive' is fanciful. Ironically, it might have been possible to achieve in the past when there was greater freedom in the economy and regulation of morals.

But today, with close regulation of the economy and freedom of individual morality, a positive initiative like the pattern language stands little chance. Action among the morally free in support of new social objectives is basically negative; the impulse of redress dominates. Minorities of every type lobby for some redistribution of the income shares in society, and for some years now society has been content to accede to such pressures on a criterion of fairness; but being fair has not helped us to form any clearer picture of the kind of society we want in the future. No positive communal ethic emerges to equate demands for quality of life with available resources.

This does not prevent Alexander, in common with authoritarians of every political hue, from placing the responsibility for success (or failure) of pattern languages squarely on the shoulders of the 'people' or 'users'. The permanent evolution of the patterns ensures that they never achieve sufficient authority to absolve their users from responsibility for decisions.

Yet in the book patterns are accorded a truth-like status. The way they are written not only discourages refutation, but often to challenge them carries the accusation of 'unhuman' intentions. There is little doubt that their authors consider them 'correct' and 'true'.

Now I claim that the patterns are developed by means of a rationalist methodological programme, as distinct from an empirical, structuralist or instrumentalist programme. In the rationalist programme knowledge is *logical*, it is embodied in *precedents*. The exemplary discipline is *jurisprudence*. The scientific procedure (for improving the precision of expectations) involves the justification of plausible arguments through *appeals to logical precedents*. The rationalist programme attributes truth to those deductive inferences that, having survived all reasonable challenges, follow from an acceptable premise. The technological procedure (for increasing control of outcomes) can be characterised as the pursuit of *consensus through negotiation*. It proceeds on the basis of the implications of self-evident truths. The programme draws heavily upon the syllogisms of Aristotelian logic.[4]

The problem is not that rational inquiry is governed by precedent, but rather that it is governed by the selection and sequencing of those precedents which give vested intentions the appearance of logical necessities. As with the selection of evidence supporting Patterns, it matters little whether precedents are established empirically, structurally or instrumentally. But as Archea points out, when they are selectively introduced into negotiations for the purpose of influencing the development of a consensus, they become part of the rationalist technological procedure, vulnerable to influence apart from evidence.[5]

The authors of *A Pattern Language* have been selective of precedents in a way that lends the book its special flavour of a manual for utopia. It is true that what has been selected as being important is material frequently ignored in conventional texts. These things *do* tend to relate to what could be called a 'timeless way of building', and many individual patterns ring true for me, as they will for many.

Nevertheless the ensemble of patterns irritates. While it is true to say that the pursuit of pleasurable environmental experiences should dominate any quest for better ways of planning and building, pleasure alone never enjoys unchallenged authority in actual social dialectic. Finding pleasure in the end product of the building process is only one of many criteria. The building must be realised within the prevailing social, commercial, and regulatory contexts – at least within a democracy. The partial way in which the evidence has been gathered for the patterns ensures that these contexts are ignored, or only mentioned in order to be repudiated or implicitly disparaged.

I agree, of course, that the building industry is a hopeless, greedy, oligarchical, resource-profligate mess; that the regulatory systems rob the freedom of the people; that architects are prostitutes and planners fools. But I'd be a fool to ignore them in making my proposals for a better world. They are part of the point of departure. Alexander leaves the hapless 'user' all at sea with respect to these very real contextual problems. In doing so, I can only assume that *A Pattern Language* is not aimed at the 'people' as it claims, but preaches only to those who can afford the luxury of isolation from the contextual variables that govern most building activity.

My objection is that because *A Pattern Language* starts from where its knowledge base would have us be, and not where we actually are, it cannot be as effective as it deserves to be. It will be shunned by the very people who most need it. Furthermore, the lopsided knowledge base leads to some patterns for building that are absurd. Righteous disdain for all building realities has led to proposals for construction (particularly Patterns 205-220), some of which are silly as well as being difficult to build and, as far as one can tell, quite unattractive. There may well be something spurious about facile condemnations of conventional practice as a temple of spuriousness.

Finally, it seems to me that the book, because of its weaknesses, runs a great danger of becoming for architectural students one of those spyglasses, like astrology or the *I Ching*, through which the self may be discovered, a medium for self determination that turns into a fashionable craze. And that would be a pity. The book contains much of value, and it is a treasure trove of esoteric evidence brought to the support of firmly held personal prejudices.

In the larger world of building though, among the 'money-hungry developers', the construction workers, the product manufacturers, the building officials and indeed many of the 'people' who do not have the inclination to design and build for themselves, the book runs little risk of making any appreciable impact. The obvious disdain of the authors for the 'straight' world of building, however justifiable, ensures little prospect of success for some of the actions proposed by Alexander to implement his ideas, particularly the planning patterns.

It may be true that we have in the recent past made a god-awful mess of our environment with centralised authorities, laws and master plans; but it is no solution to replace these by a pious hope that everyone will work with 'social responsibility' to realise Alexander's planning objectives, I suppose in order that everyone can be blamed when the 'people' make a mess of things, rather than the 'planners' or the 'courts' or the 'developers' as at present. These are the totalitarian tactics of Hitler's *'Arbeit macht frei'* or Mao's Cultural Revolution. Democracies use other devices to control people's selfishness. We have civil rights, due process of law, local elected government and other institutions. It may be that in California many people have lost faith in these institutions, and that they have become impatient, but one should reflect carefully before rejecting them. Designers, for instance should remember that design is structurally symmetrical with regulation. Both constrain variety, and while regulation constrains the choices of designers, so too do designs constrain the choices of users.

I very much hope that *A Timeless Way of Building* will provide answers to the questions I raise, a way of adapting our institutions to the benign ends of *A Pattern Language* without resorting to totalitarian means. There is much that is good in both of them.
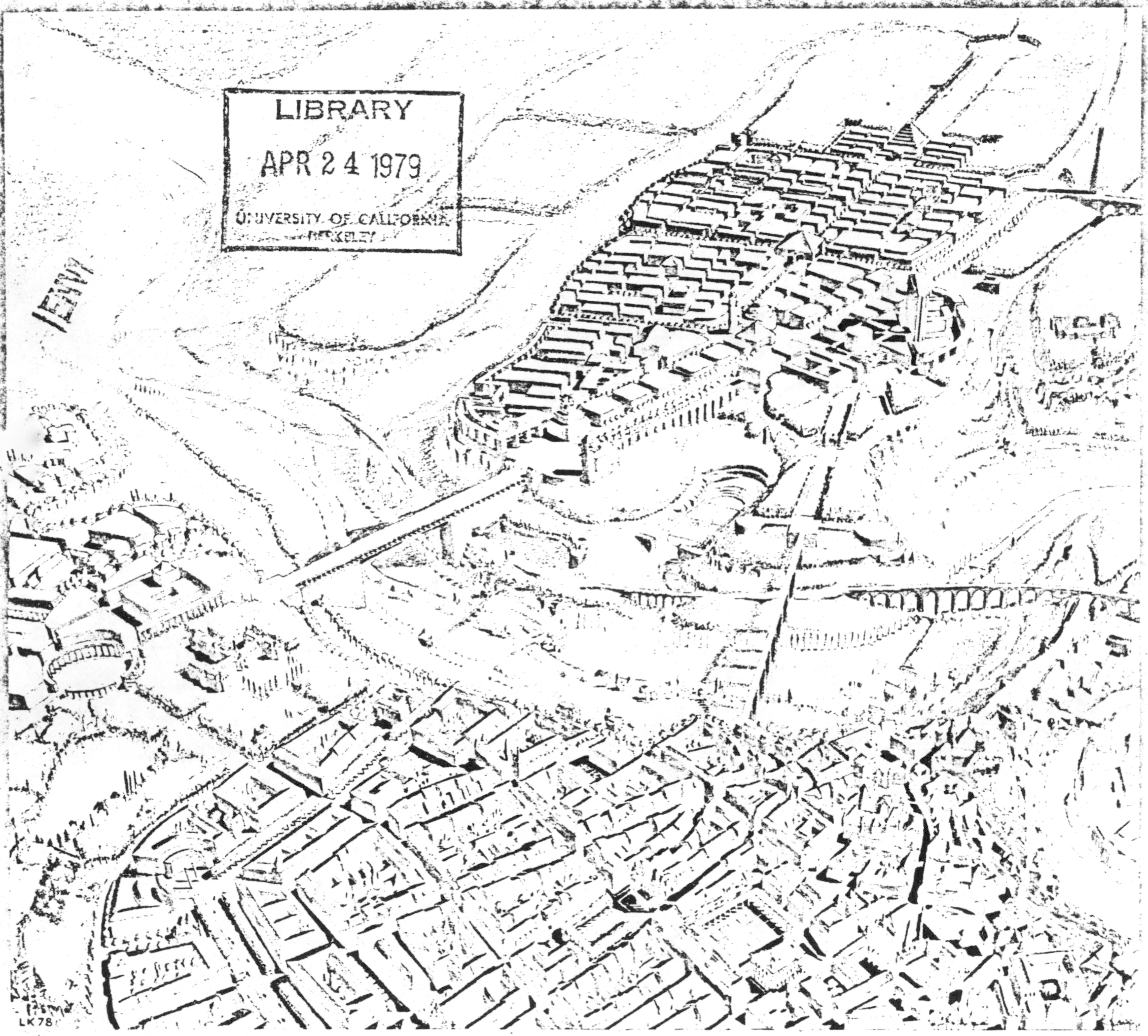
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Notes

1 In the time it took us at Building Systems Development to develop a system to provide the University of California with a University Residential Building System, the 'need' determined politically had dwindled from 4 500 units to 300, at which scale it was uneconomic. (See *AD* 11/71)

2 Beer S; *Designing Freedom;* Wiley, NY, 1974

3 A Rabeneck et al; *Beyond the Performance Concept*, report to Institute for Applied Technology, US National Bureau of Standards; National Technical Information Service GCR 77-107 1977.

4 Archea J; 'Applied Interdisciplinary Research on Environment and Aging: Conceptual and Methodological Conflicts' in *Theory Development in Environment and Aging*; Eds: R G Windley, T O Byerts, F G Ernest; Gerontological Society, Washington, 1975.

5 Archea, *op cit*

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