

by undemocratic political regimes throughout history. More recently and sadly, very undemocratic isolationist town form has been designed, built and managed by people who would genuinely claim to be interactive and essentially democratic in their own political persuasions.

As we cannot safely assume that an acceptable physical form will automatically result from good intentions, how does our claim to be democratic translate to the sort of town we should build? A most concise definition of democracy comes from the contemporary philosopher John Rawls that 'democracy arbitrates between conflicting freedoms'. For an urban designer this could be interpreted as 'designing achievable environments to support the interests of the widest publics who use them'; a definition put forward at the JCUD for a good few years now. A word allied to this has entered the urban design language more recently from the sustainability literature (Elkin & McClaren, 1991) and rightly taken on great importance, namely *empowerment*—to authorise and enable. But yet again when searching the burgeoning amount of 'sustainable' literature it is very hard to find clearly stated objectives translated into clear images and examples of *town form*, existing or proposed.

If we are to counteract the inequalities inherent in the segregated and mono-functional forms of much post-war development we need to design environments which are lively, safe, sensorily rich, choice laden, economically and spatially efficient and ecologically diverse. We believe that this can only be achieved through the promotion of mixed-use town forms. 'Good' mixed-use can therefore be defined as a finely grained mix of primary land uses, namely a variety of housing and workplaces with housing predominant, closely integrated with other support services, within convenient walking distance of the majority of homes.

As co-authors of *Responsive Environments: a manual for designers* (1985), together with Ian Bentley, Alan Alcock and Graham Smith, we set out to be explicit about the values which underpinned our approach to urban design, and to provide a detailed explanation of the *form* implications of these social and political values. The idea of responsiveness is based on maximizing choice for the individual, but not at the expense of the collective. We argued that the design of a place affects the choices people can make at many levels:

- it affects *where people can go*, and where they cannot: the quality we shall call *permeability*;

- it affects the *range of uses* available to people: the quality we shall call *variety*;
- it affects how easily people can *understand* what opportunities it offers: the quality we shall call *legibility*;
- it affects the degree to which people can use a given place for *different* purposes: the quality we shall call *robustness*;
- it affects whether the detailed *appearance* of the place makes people aware of the choices available: the quality we shall call *visual appropriateness*;
- it affects people's *choice of sensory experiences*: the quality we shall call *richness*;
- it affects the extent to which people can put their *own stamp* on a place: we shall call this *personalization*.

It is now 9 years since publication of the book and at least 10 since it was written. Although we still hold to these qualities, it is not surprising that our ideas have evolved and been developed during this time through considerable debate by staff and students within the Joint Centre for Urban Design and elsewhere. Both of us make a critique of some aspects of *Responsive Environments* in our respective chapters of *Making Better Places: Urban design now* (Hayward & McGlynn, 1993). Through our experience in practice and teaching we have reduced the original list to four fundamental qualities: permeability, variety (vitality, proximity and concentration), legibility and robustness (resilience). These four qualities deal with the spatial structure and use patterns of urban areas and have the most fundamental impact on opportunities for personal choice and equity of access, and are therefore the critical qualities in the achievement of democratic town form.

Ian Bentley (1990), in work he has been developing with Ian Lyne at the JCUD, has initiated the inclusion of a new set of qualities which relate to the ecological impacts of urban forms and patterns of activity. Their work puts forward a further three basic qualities—resource efficiency, cleanliness and biotic support. The development of these qualities offers new ways in which patterns of land uses and spatial integration can aid the diversity and empowerment being sought in the value system described in this section. Many urban designers have been arguing for a return to a more democratic urban form for some time. However, the sustainability debate has given a welcome boost to these and related matters of social justice and ecological balance. What is more, they lead directly into the political arena as issues of