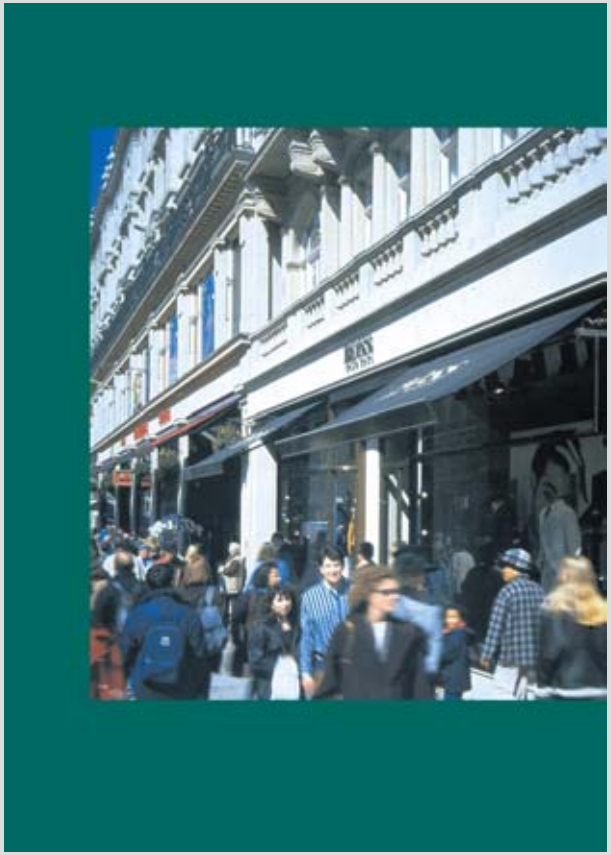


Department of the Environment, Transport and the Regions, Commission for Architecture and the Built Environment,

***By Design. Urban Design in the Planning System: towards Better Practice*, 2000**

Fig. 1, 2

Objectives of urban design and aspects of development form –
Obiettivi dell'urban design e aspetti dell'assetto formale

OBJECTIVES OF URBAN DESIGN	
CHARACTER *A place with its own identity*	To promote character in townscape and landscape by responding to and reinforcing locally distinctive patterns of development, landscape and culture.
CONTINUITY AND ENCLOSURE *A place where public and private spaces are clearly distinguished*	To promote the continuity of street frontages and the enclosure of space by development which clearly defines private and public areas.
QUALITY OF THE PUBLIC REALM *A place with attractive and successful outdoor areas*	To promote public spaces and routes that are attractive, safe, uncluttered and work effectively for all in society, including disabled and elderly people.
EASE OF MOVEMENT *A place that is easy to get to and move through*	To promote accessibility and local permeability by making places that connect with each other and are easy to move through, putting people before traffic and integrating land uses and transport.
LEGIBILITY *A place that has a clear image and is easy to understand*	To promote legibility through development that provides recognisable routes, intersections and landmarks to help people find their way around.
ADAPTABILITY *A place that can change easily*	To promote adaptability through development that can respond to changing social, technological and economic conditions.
DIVERSITY *A place with variety and choice*	To promote diversity and choice through a mix of compatible developments and uses that work together to create viable places that respond to local needs.

ASPECTS OF DEVELOPMENT FORM	
LAYOUT: URBAN STRUCTURE *The framework of routes and spaces that connect locally and more widely, and the way developments, routes and open spaces relate to one other.*	The layout provides the basic plan on which all other aspects of the form and uses of a development depend.
LAYOUT: URBAN GRAIN *The pattern of the arrangement of street blocks, plots and their buildings in a settlement.*	The degree to which an area's pattern of blocks and plot subdivisions is respectively small and frequent (fine grain), or large and infrequent (coarse grain).
LANDSCAPE *The character and appearance of land, including its shape, form, ecology, natural features, colours and elements, and the way these components combine.*	This includes all open space, including its planting, boundaries and treatment.
DENSITY AND MIX *The amount of development on a given piece of land and the range of uses. Density influences the intensity of development, and in combination with the mix of uses can affect a place's vitality and viability.*	The density of a development can be expressed in a number of ways. This could be in terms of plot ratio (particularly for commercial developments), number of dwellings, or the number of habitable rooms (for residential developments).
SCALE: HEIGHT *Scale is the size of a building in relation to its surroundings, or the size of parts of a building or its details, particularly in relation to the size of a person. Height determines the impact of development on views, vistas and skylines.*	Height can be expressed in terms of the number of floors; height of parapet or ridge; overall height; any of these in combination; a ratio of building height to street or space width; height relative to particular landmarks or background buildings; or strategic views.
SCALE: MASSING *The combined effect of the arrangement, volume and shape of a building or group of buildings in relation to other buildings and spaces.*	Massing is the three-dimensional expression of the amount of development on a given piece of land.
APPEARANCE: DETAILS *The craftsmanship, building techniques, decoration, styles and lighting of a building or structure.*	This includes all building elements such as openings and bays; entrances and colonnades; balconies and roofscape; and the rhythm of the facade.
APPEARANCE: MATERIALS *The texture, colour, pattern and durability of materials, and how they are used.*	The richness of a building lies in its use of materials which contribute to the attractiveness of its appearance and the character of an area.

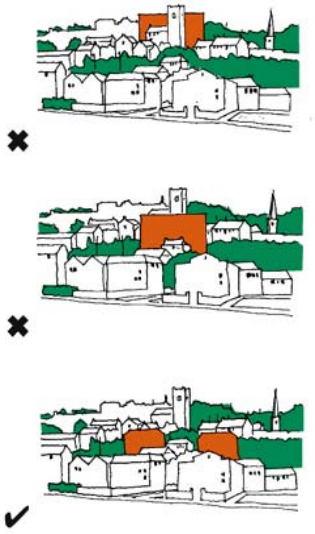
Fig. 3

Character – Carattere

Continuity and enclosure – Continuità e chiusura

Integrating new development into its landscape setting reduces its impact on nature and reinforces local distinctiveness.

- The layout, massing and landscape design of development can be integrated successfully into the wider landscape through using structure planting, shelter belts, green wedges, and (along natural features, roads, rivers and canals) green corridors.
- Reflecting plant species that are common locally will help planting in new development to reinforce the distinct natural qualities of a place.
- Integrating new and existing development at their boundaries maintains the continuity of urban form and landscape.



SKYLINES ARE SENSITIVE TO BEING OBSCURED BY HIGH BUILDINGS IN FRONT OF EXISTING BUILDINGS OR HAVING THEIR SILHOUETTE SPOILED BY HIGH BUILDINGS BEHIND THEM

Responding to the existing layout of buildings, streets and spaces ensures that adjacent buildings relate to one another, streets are connected and spaces complement one another.

- The existing layout of an area reflects its history, functions and connections with adjoining areas. These can contribute to the interest and richness of new development, and to its potential to accommodate further change in future.
- Integrating existing buildings and structures into new development can maintain the continuity of the built fabric as well as retaining buildings of local distinctiveness, historic or townscape merit.
- Narrow plot widths promote more active frontages, increase the sense of enclosure and allow higher densities. They are particularly appropriate where they reflect existing settlement patterns.

Responding to local building forms and patterns of development in the detailed layout and design of development helps to reinforce a sense of place.

- Local building forms and details contribute to the distinctive qualities of a place. These can be successfully interpreted in new development without necessarily restricting the scope of the designer. Standard solutions are rarely acceptable, as they are unlikely to create a distinctive identity or make good use of a particular site.
- Local building forms sometimes include distinct housing types, boundary treatments, building lines, roof slopes, window types and gardens.
- Responding to such forms and practices should only be at the appropriate scale. The common practice of inflating traditional domestic forms to larger scales is generally to be avoided.

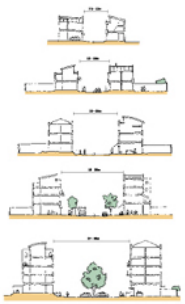
Buildings that relate to a common building line reinforce and define the street.

- Development that follows the boundary of the street block can help to create an unambiguous distinction between public and private spaces. Respecting the historic or traditional building line helps to integrate new development into the street scene, maintains the continuous urban fabric and avoids places of concealment.
- Continuous street frontages have a minimum of blank walls and gaps between buildings. Gaps between buildings reduce the degree to which the street is overlooked, as do blank walls (which also encourage graffiti). There are places, however, such as some villages where strong building lines are not a dominant feature of the street scene.
- Projections and setbacks from the building line, such as bays and entrances add valuable emphasis without undermining the principle of continuity.
- Where buildings step back from the common building line, they can create usable, attractive spaces for pedestrians.
- Small setbacks can be used to soften the impact that buildings and the public realm have on each other.

The primary access to a building is best achieved from the street.

- Building entrances that are clearly identifiable contribute to the ease of understanding a place. Entrances are where people move between public and private space and create activity on the street.
- Direct access to the street from ground floor premises (both housing and shops), rather than by way of communal entrances, can reduce the length of blank facades.
- Primary access to buildings by means of internal courtyards reduces street activity and the live connection between building and street.
- Access to private or communal back yards, such as for parking, requires careful control by means of gates or by overlooking.

PERIMETER BLOCKS CAN WORK AT ANY SCALE



THE SCALE OF BUILDINGS SHOULD RELATE TO THE WIDTH OF THE STREET

Fig. 4, 5

Qualità dello spazio pubblico – *Quality of the public realm*
Facilità di movimento – *Ease of movement*

- Buildings on busy street corners that are designed to accommodate shops, restaurants and other similar activities can contribute to local identity and activity.

Well-designed public space relates to the buildings around it.

- Public space should be designed with a purpose in mind. Space left over after development, without a function, is a wasted resource and will detract from a place's sense of identity. It is likely to be abused and vandalised, diminishing safety and security.

Streets and spaces that are overlooked allow natural surveillance, feel safer and generally are safer.

- Buildings of all types which front on to streets, squares or parks, contribute to overlooking by showing their public face.
- Making separate footpaths or cycle tracks as direct as possible, and well overlooked, will help avoid producing places where pedestrians and cyclists feel unsafe.
- There are advantages in play areas, other communal space and parked cars being overlooked.
- Living over shops encourages natural supervision and evening activity.
- Lighting and planting can help or hinder surveillance and perceptions of safety.

The design of public spaces should take account of the micro-climate.

- The layout and massing of development should take account of local climatic conditions, including daylight and sunlight, wind, temperature and frost pockets.
- The micro-climate will both influence and be influenced by the form of development, including the orientation of buildings and the degree of enclosure.
- Public spaces should be protected from down-draughts from tall buildings, as well as from lateral winds.
- Deciduous trees and climbers can filter heat and pollution in summer and allow low winter sunlight.

MEETING ACCESSIBILITY STANDARDS CAN INSPIRE CREATIVE SOLUTIONS

HIGH QUALITY MATERIALS FOR SHARED SPACES

- Boulevards are a means of creating continuous frontage development and providing a high level of traffic capacity.
- The traditional form of high street, which allows for stopping, parking and slow traffic, provides an effective way of accommodating local shopping and economic activity.

A development's access and circulation should contribute to a fine-grain network of direct and connected routes within and beyond the site rather than creating big blocks.

- The grain of streets is usually finer around busy shopping streets.
- Streets that connect to other streets encourage movement and activity and short linked-up streets can make places more accessible and encourage walking and cycling.
- In designing for connected streets care should be taken to avoid undermining the 'defensible space' of particular neighbourhoods.

The way development is laid out can encourage low traffic speeds.

- Developments should be designed with regard to their effect on traffic speeds.
- Traffic speeds can be managed by the arrangement of buildings and spaces. Physical traffic-calming measures should be secondary but considered as an integral part of the design.
- Changes in materials or 'gateways' at the entrance to low speed areas can alert motorists to the need to reduce speed.
- Smaller corner radii will encourage more careful vehicle movement.

The layout and density of development can help increase accessibility to public transport.

- Higher densities help to support public transport.

Integrated transport interchanges promote the use of public transport and provide for seamless movement between all modes of travel.

- Higher density commercial and mixed-use developments, civic buildings and developments likely to generate large numbers of visitors are best located within close walking distance of public transport interchanges.
- Stations designed as an integral part of the public realm create safe and secure pedestrian environments at all times of the day.

PUBLIC TRANSPORT AS AN INTEGRAL PART OF THE STREET

THE NEW CENTRAL SQUARE AT BIRMINGHAM'S BRINDLEYPLACE LINKS TO THE CITY CENTRE'S MAIN PEDESTRIAN ROUTE

Fig. 6, 7

Adaptability – Flessibilità
Diversity – Differenziazione

Simple, robust building forms, not tightly designed to a very particular use allow for the greatest variety of possible future uses to be accommodated.

- Floor-to-ceiling heights and building depths should be considered in the light of the need for flexibility to allow later conversion of a building to other uses.
- Adaptable ground floors on corners of busy streets allow different uses to be accommodated over time.
- Well-designed housing is adaptable to the changing needs of its occupants.

THE UNDIVIDED GROUND FLOOR SPACES IN MEWS BUILDINGS MAKE THEM EASY TO ADAPT. SUCH FLEXIBILITY CAN BE DESIGNED INTO NEW BUILDINGS

A DUTCH BARN CONVERTED INTO OFFICES AND STABLES

Places should be capable of being used for a range of activities.

- Well-designed public spaces allow for different uses, such as events, festivals and markets.
- Development can be related to the public realm in ways that encourage rather than discourage flexible use of buildings and space. This can be achieved through the imaginative use of elements such as terraces, balconies and forecourts.
- To encourage a mix of uses buildings can be designed so as to facilitate different access arrangements at different times.

Developments that endure have flexible layouts and design.

- Fine-grain development is easier to adapt than large-scale megastructures.
- Roads within a development which are built to adoptable standards, rather than being locked into estate management agreements (which inhibit change), will allow a greater variety of uses to be developed over time.
- The layout of the infrastructure servicing development (including water supply, sewerage, drainage, gas, electricity, cable, telephone, roads, footpaths, cycleways and parks) should take account of foreseeable changes in demand.
- Building to last means thinking about future uses, expansion and changing needs for access. For example, the location of means of escape can facilitate a building's later conversion, the position of the building on its site can affect scope for expansion, and floor-to-ceiling heights are important in this context.

LOFT CONVERSIONS TAKE ADVANTAGE OF ROBUST BUILDING FORMS

LONG-LIFE, LOOSE-FIT STRUCTURES HAVE FLEXIBILITY BUILT IN

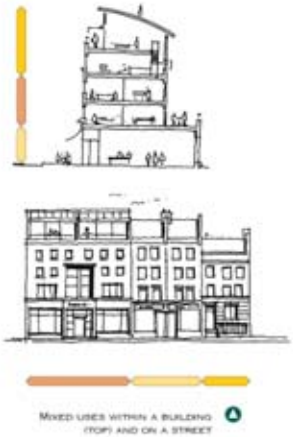
THE ADAPTABLE FORM OF THIS FORMER COMMERCIAL BUILDING ALLOWED IT TO BE CONVERTED TO HOUSING WHEN THE MARKET CHANGED

DIVERSITY
A place with variety and choice

The mix of uses (whether within a building, a street or an area) can help to determine how well-used a place is, and what economic and social activities it will support.

A mix of uses may be appropriate at a variety of scales: within a village, town or city; within a neighbourhood or a street; or even in a particular building. In a town centre, for example, housing can provide customers for shops, make use of empty space above them and generate activity when they are closed. In residential areas, workplaces, shops and other facilities can make the place more than just a dormitory.

Mixed-use development can make the most of opportunities for higher densities and intensive activity at locations with good access to public transport. At higher densities, it can provide the sort of environment that will suit particular kinds of household, such as single or young people, or couples without children.



MIXED USES WITHIN A BUILDING (TOP) AND ON A STREET

Fig. 8, 9

Thinking Machine

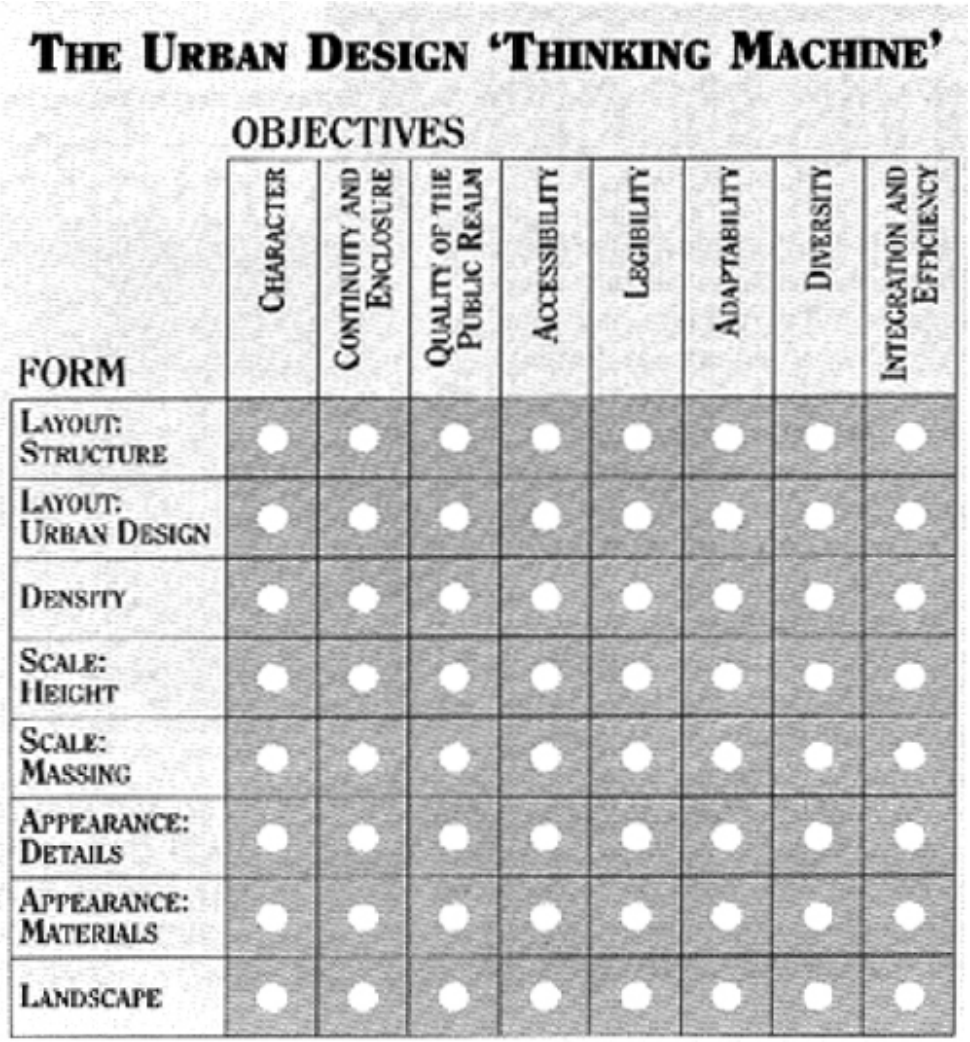


Fig. 10