

Section 1 Research and Analysis Tools

Understanding the Urban Context and Character

Research and analysis tools are essential for understanding the context and character of the urban environment. These tools should be used in the first steps of an urban design project. They identify the qualities that make a place special, and enlighten design development and decision making. The wide scope of urban design research encompasses, amongst other things, the history, physical form and characteristics of towns and cities, and the behaviour of the people who inhabit them. Common topics for urban design research include the analysis and aspects of activity, accessibility and liveability.

These tools can be used in various ways to inform successful design and management actions. They are often used in a variety of combinations. For example, an urban design audit or character appraisal of a site or neighbourhood may involve analytical techniques, such as a walk-through, studies of urban morphology and building typology, mapping techniques and archive research.

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Archive Research



What it is:

Collecting and analysing a wide range of historical data contained in, for example, institutional, corporate or public records. Archive research provides historical information about the past environment, activities and structures.

What it's useful for:

Archive research provides invaluable primary and secondary source material where it is not possible to observe, interview or survey the past community. It allows the analysis of the past heritage, character and context for projects where maintaining an authentic sense of place is important.

How it's done:

Collections of maps, drawings and photographs are particularly useful for urban design and heritage-related research. Collections of archival material can be found in the New Zealand Archives, the Alexander Turnbull Library (a collection in the National Library of New Zealand), museums, most universities, as well as local council libraries and archives.

References

- Archives New Zealand Te Rua Mahara o te Kāwanatanga: <http://www.archives.govt.nz/>. Works to ensure there is an authentic and reliable record of government by advising government agencies on how to create and maintain records. It preserves and provides access to those records that need to be kept permanently, and is responsible for millions of such items, including the Treaty of Waitangi, immigration and legal records, films and photographs.
- National Library of New Zealand Te Puna Mātauranga o Aotearoa: <http://www.natlib.govt.nz/>. Has a unique role to collect and maintain literature and information resources that relate to New Zealand and the Pacific, make this information readily available and preserve New Zealand's documentary heritage for generations to come. The National Library holds rich and varied collections of research material, and includes the Alexander Turnbull Library – a storehouse of words, pictures and sounds that tell us about the activities of people in New Zealand and the Pacific.
- Alexander Turnbull Library: <http://timeframes.natlib.govt.nz/>. Timeframes, the online database of heritage images (a division of the National Library of New Zealand).
- New Zealand Historic Places Trust: <http://www.historic.org.nz/>. Has a national schedule of New Zealand's Register of Historic Places, Historic Areas, Wahi Tapu and Wahi Tapu Areas. Its website is a work in progress, with 1,000 places on the website out of the 6,000 places on the Register.
- The Architecture Archive, University of Auckland Library: <http://www.architecture-archive.auckland.ac.nz/>. Dates from 1975 and has drawings, perspectives, photos, specifications and other articles allied to architectural and construction processes. The archive is the repository of the New Zealand Institute of Architecture Annual Awards from 1927 to present.
- Architectural Archives, Macmillan Brown Library, University of Canterbury: <http://library.canterbury.ac.nz/mb/>. Consists of around 20,000 items from the 1870s through to the 1980s. It holds drawings from most of Christchurch's leading architectural practices.
- The Hocken Collections, University of Otago Library: <http://www.library.otago.ac.nz/libs/hocken/>. Includes material from Otago and Southland, including material from architectural practices.
- *Dictionary of New Zealand Biography*: <http://www.dnzb.govt.nz/dnzb/>. Contains over 3,000 biographies of New Zealanders who have 'made their mark' on New Zealand.
- Also contact your local museums, historical societies and libraries.

Accessibility Analysis

What it is:

The combination of an ‘accessibility audit’ and an ‘accessibility resource appraisal’ provides the base data on whether people can easily get to places of work, healthcare facilities, education facilities, food shops and other destinations that are important to local residents’ wellbeing and social inclusion.

What it’s useful for:

Providing base data and evidence to guide decision making and the creation of an accessibility action plan.

How it’s done:

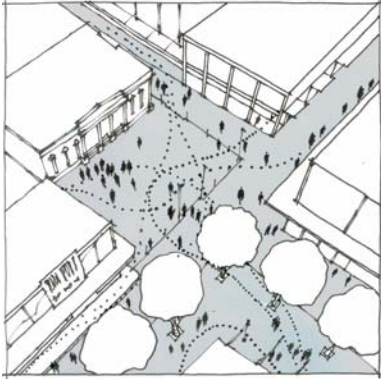
An ‘accessibility audit’ identifies barriers to accessibility, drawing as much as possible on information already held by local authorities and other bodies. The audit could be carried out through GIS-based mapping of socio-demographic information, data on deprivation, and car availability in relation to public transport routes and the location of services; complemented by consultation with local communities and liaison with frontline professionals and providers of services.

An ‘accessibility resource appraisal’ identifies the best value for money solutions for tackling accessibility barriers. The appraisal should consider whether better use could be made of existing services and facilities through co-location of services, changes in opening times or partnership agreements.

Reference/example

- Accessibility planning: <http://www.accessibilityplanning.gov.uk/>. Provides a variety of information on accessibility planning and analysis, including background reports, accessibility processes, case studies and planning initiatives in the United Kingdom.

Behaviour Observation



What it is:

Observations that track and record on maps and diagrams the movements, use and interaction of people with urban spaces and the built environment.

What it's useful for:

Understanding how the physicality of the built environment affects activities and social behaviour, through recording the use of urban spaces by people. These observations and understandings can help direct design development and changes to urban spaces and places.

How it's done:

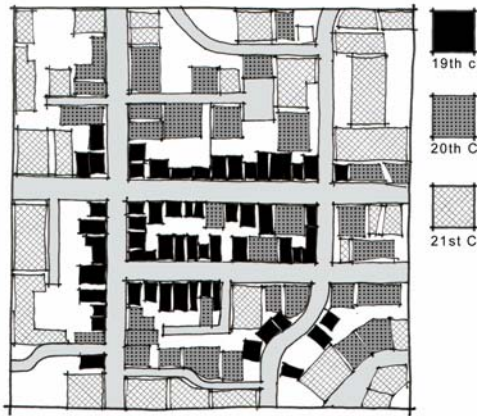
Systematic observation and recording of patterns of human behaviour through notes and diagrams, mapping, or categorisation and counting of activities. Photographs, including time-lapse photography, can also be used. 'Behaviour mapping', also called 'activity mapping', involves recording on a plan or map the patterns of movement of people and use in a particular space or place, and may include getting users themselves to plot how they use spaces.

Behaviour observation may include 'physical trace observation', a systematic inspection of a place in the absence of its users to identify traces of activity. These traces may include worn areas or paths, evidence of users adapting or personalising a place, or messages such as notices or graffiti. Observations are recorded by counting, photographing, mapping or a combination of these techniques. This is best used in combination with other methods (such as interviews and observation of users) to check hypotheses on the reasons for the observed traces.

Example

- Gehl Architects 2004. *City to Waterfront: Public Spaces and Public Life*, client: Wellington City Council. This publication details user patterns along the waterfront and in key central-city urban open space areas using behavioural observation.

Building Age Profile



What it is:

Mapping the age of buildings to show the age distribution and concentrations of buildings and periods of urban development.

What it's useful for:

A building age profile can identify the patterns of urban development through the age of the building stock. For example, how much of the housing stock was built before a certain age. It can inform and help delineate 'heritage precincts' or 'character areas' through providing evidence of historical urban development patterns and growth.

How it's done:

Buildings of similar age are identified and their locations are plotted on a map or series of maps, each covering a defined time period (for example, 10 or 20 years). This gives a spatial picture as well as providing analytical correlations of the building age with a particular building type or style. Conversion of this data into histograms allows a simple graphic comparison of building ages with other places. This type of information is best gained from existing council files or databases.

Reference/example

- Ministry for the Environment 2005. *Urban Design Case Studies: New Zealand Urban Design Protocol*: <http://www.mfe.govt.nz/publications/urban/urban-design-case-studies-mar05/html/page9.html>. Character Appraisal in Inner-City Wellington pp 38–43 illustrate the application of character analysis techniques in established urban neighbourhoods.

Character Appraisal

What it is:

An identification of typical development patterns that illustrate established urban neighbourhoods.

What it's useful for:

Identifying older neighbourhoods that have retained a high degree of authenticity of form and character. It also allows for the measurement of the value and significance of the neighbourhood to the town or city. This tool is a precursor to the application of character and heritage management techniques such as a precinct plan, design guide and streetscape strategy listed in the section 'Planning and design tools'.

How it's done:

A full assessment of a number of character features, including: building assessment (age, type, scale, height and style), site coverage, lot size, building setbacks on all boundaries, block size, street assessment (pattern, design, width), landscape features (fence/wall details, tree species, paving and street furniture), and other visual characteristics. This is followed by a character analysis using criteria to determine the importance of that character, key elements in the study area and their relative significance.

Example

- Ministry for the Environment 2005. *Urban Design Case Studies: New Zealand Urban Design Protocol*, Character Appraisal in Inner-City Wellington: <http://www.mfe.govt.nz/publications/urban/urban-design-case-studies-mar05/html/page9.html>. Pages 38–43 illustrate the application of character analysis techniques in established urban neighbourhoods.

Crime Prevention through Environmental Design Safety Audit

What it is:

A 'Crime Prevention through Environmental Design' (CPTED) safety audit identifies the safety issues and concerns of a community within a specific area.

What it's useful for:

Assessing and proposing practical design changes to fix the actual and perceived safety issues of a group or organisation in an area. It promotes community ownership and responsibility of safety issues while involving groups or organisations in the planning and decision-making

process. It also provides guidance and information to planners, designers and service providers on how to improve and maintain community safety.

How it's done:

A local community group, local authority or the police can facilitate a CPTED safety audit. The CPTED safety audit involves asking community user groups about their feelings on safety when they are moving around a site, finding out what contributes to these feelings and asking what changes they would like to improve their safety in these places. This encourages a subjective interpretation of the environment from all users, including women, youth, elderly and people with disabilities. The key steps are making contact with all community users, conducting the CPTED safety audit, developing a summary of issues and recommendations and undertaking discussions with people, such as the local council, who can provide design guidance, advice and solutions.

References/examples

- Ministry of Justice 2005. *National Guidelines for Crime Prevention through Environmental Design in New Zealand*: <http://www.justice.govt.nz/cpu/publications/index.html>. Part 1: Seven Qualities of Safer Places and its companion Part 2: Implementation Guide.
- Safer Auckland City: <http://www.aucklandcity.govt.nz/auckland/introduction/safer/default.asp>. Information on minimising crime through design and safety guidelines.

Crime Prevention through Environmental Design Safety Site Assessment

What it is:

A process by which professionals and specialists trained in Crime Prevention through Environmental Design (CPTED) assess an existing site or proposed plans before construction to determine the factors that impact on its actual and perceived safety. The aim is to make recommendations for improving the safety of the site or, more importantly, to help prevent safety issues before construction.

What it's useful for:

Identifying the safety factors that increase the actual and perceived vulnerability for users in a certain area. It also determines the measures and design applications required to enhance the safety of that area for users and to deter potential offenders. Assessments are most effective when undertaken before the final planning and construction of a development.

How it's done:

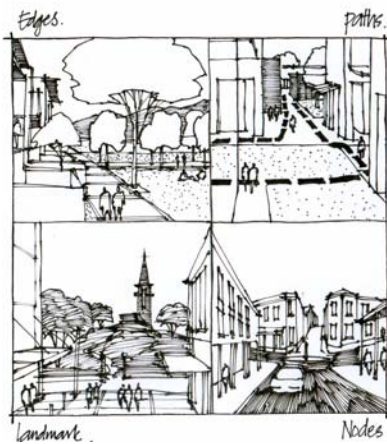
A wide range of data analysis, including an exploration of social, economic and environmental issues, is required. Several site visits may be necessary to assess and investigate various aspects

of the area at different times of the day and week and to identify the different user groups. A CPTED safety site assessment may include a [CPTED safety audit](#) and stakeholder interviews. The police may provide assistance with on-site evaluation, supply of crime statistics and crime intelligence.

Reference/example

- Ministry of Justice 2005. *National Guidelines for Crime Prevention through Environmental Design in New Zealand*: <http://www.justice.govt.nz/cpu/publications/index.html>. Part 1: Seven Qualities of Safer Places and its companion Part 2: Implementation Guide.

Legibility Analysis



What it is:

Recording on a map the mental images that individuals or the community have of the environment as either: edges, nodes, paths, landmarks or districts.

What it's useful for:

Legibility and identity studies of the urban environment where the community's perceptions of features, places, neighbourhoods, towns or cities are required. This type of study provides information on how memorable positive features can be emphasised and celebrated or negative design features may need to be mitigated.

How it's done:

The analysis combines a series of sketch maps drawn by users with interviews to build up a collective view of a neighbourhood, town or city. The five elements – edges (for example, beaches, rivers, railway lines, motorways), nodes (for example, neighbourhoods, town centres), landmarks (for example, historic buildings, natural features), paths (for example, key roads, pathways) or districts (for example, land use, building types, geographical location) – are

typically identified and used to describe a collective view of the town, neighbourhood or city. Legibility analysis was first used by Kevin Lynch in his book, *The Image of the City*. It is sometimes known as ‘cognitive mapping’ or ‘mental mapping’.

Reference

- Lynch, Kevin 1960. *The Image of the City*. MIT Press: Cambridge, MA. Lynch describes a five-year study in USA cities that reveals what elements in the built structure of a city are important in the popular perception of the city.

Example

- Ministry for the Environment 2002. *People+Places+Spaces*: <http://www.mfe.govt.nz/publications/rma/people-places-spaces-mar02/index.html>. Page 40, diagram of legibility analysis.

Mapping



What it is:

A graphic technique for recording and analysing the physical features and structural patterns of a geographical area.

What it's useful for:

Providing base information for all types of projects and initiatives. The application of mapping is virtually unlimited. It includes, for example, assessment of spatial enclosures, street edge conditions, distribution of open space and street types, public-private space assessments, and distribution of landscape elements. Mapping to scale allows quantitative analysis of physical features and is a base for showing planned design interventions in context. Mapping enables comparative assessment or monitoring of quantitative and qualitative design conditions and elements over time.

How it's done:

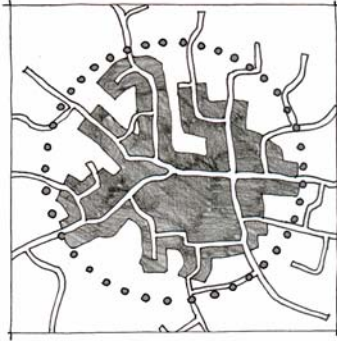
Mapping techniques range from simple paper records to complex digital systems. General mapping techniques include:

- 'Overlay mapping' using different mapping layers or montages of tracing paper, or within a computer, to add or remove layers of information to reveal patterns and relationships that would not otherwise be obvious.
- 'GIS mapping' is a computer system designed to allow users to collect, manage and analyse large volumes of spatially referenced information and associated attribute data. It is an efficient means of sourcing and presenting comprehensive graphic information on entire neighbourhoods, towns and cities, as well as elements within them. GIS techniques enable analysis of complex multiple map overlays. A number of local councils have simplified GIS maps available on the web.
- 'Aerial photographs' are photos taken from an elevation and are generally available from local councils and private agencies for most urban areas in New Zealand. They provide insight into patterns of building and urban landscape development, including views into areas and details of development that otherwise cannot be seen from ground level observation. Aerial photographs can also be overlaid with other map-related information such as topographic contours, rivers, streams, soil structure, buildings and land uses.
- 'Digital elevation model' (DEM) or 'digital terrain model' (DTM) where aerial photos are draped over a three-dimensional contoured model creating an image that contains both topographic and real-life visual information that are to scale and can be used for perspective views and fly-through observations.

References

- Contact your local council for aerial photos, plans and GIS information.
- A number of local councils have aerial photos, plans and GIS information on their websites. A full list of council websites can be found on the Quality Planning website: <http://www.qualityplanning.org.nz/contacts/index.php> or Local Government New Zealand website: <http://www.lgnz.co.nz/lg-sector/maps/>.

Ped-Shed Analysis



What it is:

A mapping technique that calculates the population catchment within a five or 10 minute walk from an activity, transport stop or node.

What it's useful for:

Providing 'walkability analysis' of important destinations (for example, town centres or transport nodes) within neighbourhoods, and how evenly these destinations are distributed and dispersed through a town or city. When planning new developments it can be used to identify optimum locations for new facilities and indicate where residential density may be increased.

How it's used:

A fixed-diameter circle is overlaid on a map with the centre placed on the destination point. Circle radii are usually based on an average person walking 400 metres in five minutes. A second radius of 800 metres indicates a 10 minute walk. The population density within this radius can then be calculated to determine the number of people within easy walking distance of the destination. A ped-shed analysis can be refined further by mapping linkages and obstacles that may decrease or increase travel distance or time to give a more accurate population figure.

Examples

- Land Transport New Zealand 2005. Measuring Walkability, chapter 9. *In: The Pedestrian Network Planning and Facilities Design Guide*. Provides methods of measuring walkability through both desk top exercises and on site analysis: <http://www.landtransport.govt.nz/consultation/ped-network-plan/doc/chapter9.pdf>.
- Housing New Zealand Corporation 2002. *Design Guide – Urban*: <http://www.hnzc.co.nz/aboutus/publications/devguide/Urban.pdf>. Includes an assessment of a housing site in relationship to urban amenity.

Space Syntax Analysis



What it is:

Space syntax is a set of theories and techniques that analyse how street networks are connected through mapping the spatial configurations and accessibility of open spaces and street patterns.

What it's useful for:

Explaining why certain streets and spaces are more heavily used than others, because connected street patterns are efficient in terms of fuel consumption and community integration. Space syntax maps the relative accessibility of parts of a site, neighbourhood or city and identifies the areas where improvements in access can be made.

How it's done:

The technique determines the degree of integration or segregation of streets and other spaces within a neighbourhood, town or city, by studying the 'axial lines' and 'convex spaces'. 'Axial lines' indicate primary movement routes, while 'convex spaces' indicate gathering points and places where concentrations of axial lines come together. Analysis can be based on drawings produced manually, or by using proprietary computer software available from Space Syntax, London.

References

- Space Syntax Laboratory, University College London: <http://www.spacesyntax.org/>. Gives an introduction to space syntax and provides a publication list, software and database information.
- Space Syntax: <http://www.spacesyntax.com/>. Research consultancy arm of the Space Syntax Laboratory, University College London.

Surveys

What it is:

A systematic way of determining the views and opinions of a large number of people on a particular topic through the use of interviews with structured questions or a standardised questionnaire.

What it's useful for:

Surveys can be used to gather large amounts of comparable and easily quantifiable data, and to provide an objective basis for planning and future action. Surveys can provide both qualitative and quantitative data. A structured interview will uncover qualitative data on people's values and perceptions that can be quantitatively tabulated. A professionally produced survey is a useful means of accurately and objectively assessing community opinion on high-profile and controversial community projects.

How it's done:

Survey types used most commonly in urban design projects include 'public satisfaction surveys' and '3+, 3- surveys', also known as 'three questions surveys'. 'Three questions surveys' are common in open space and neighbourhood improvement projects. They ask people to identify three things they like and three things they dislike about the current environment, and note their suggestions for changes. A 'visual preference survey' obtains community responses to a range of images and is used to develop an understanding of and consensus on the character of a place or future development.

'Placecheck' (<http://www.placecheck.info/>) is a specific urban design questionnaire for the community, developed by the UK Urban Design Alliance, which reveals where improvements are needed and focuses on how to achieve them. It is based on questions and answers in three sections: people ("how can the people whose influence and actions shape the place work together more effectively?"); places ("how can the physical form of buildings and spaces help to make the place work better?"); and movement ("how can the network of streets, routes and public transport help bring the place to life?").

A further survey method is the 'post-occupancy evaluation', a systematic survey and study of how occupants respond to a new or existing building or environment once it is operational. It is used to fine-tune the design and management of a building or place, and to inform the design brief for similar developments in the future. A refinement on this is the 'design quality indicators' (<http://www.dqi.org.uk/>), a tool to assess design quality of proposed and constructed buildings. This evaluation of performance or amenity can also be called 'benchmarking'.

References

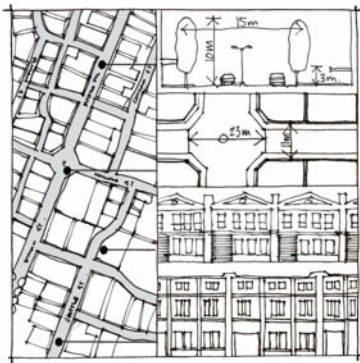
- Ministry for the Environment 2002. *Creating great places to Live+Work+Play: Livable urban environments: process, strategy, action*: <http://www.mfe.govt.nz/publications/rma/live-work-play-jun02/guide/community-methods.html#list>. Page 17 describes 'list of qualities', surveys – 'three questions' and 'public satisfaction surveys' and methods, with checklists and case studies.

- Activity Friendly Environments, SPARC: <http://www.sparc.org.nz/filedownload?id=374dfc8b-81fc-449c-b579-4d475776defc>. Provides a checklist to assess how walk and bike friendly your current environment is at present.
- Placecheck: <http://www.placecheck.info/>. Developed by the UK Urban Design Alliance, <http://www.udal.org.uk/>. This website provides information on how to undertake your own placecheck with timelines, checklists, a set of detailed questions and a specific placecheck for streets, country, planning, urban design, highways and parks.
- Design Quality Indicator (DQI): <http://www.dqi.org.uk/>. The website provides an overview of the process, and links into the DQI tool.
- Walkinginfo Pedestrian and Bicycle Information Centre, United States: <http://www.walkinginfo.org/cps/checklist.htm>. Walkability checklist questions to help you evaluate your neighbourhood's walkability. This checklist provides both immediate answers and long term solutions to your neighbourhood's potential problems. A bikeability checklist is also available at this site.
- Local Government Commission, United States: http://www.lgc.org/freepub/land_use/participation_tools/visual_surveys.html. Information on public participation and visual surveys, and detailed information on community image surveys.

Example

- *Orewa – A World Class Urban Coastal Community: Discussion Document October 2004*: http://www.rodney.govt.nz/services/orewa_growth_project/orewa_growth_project10to50.pdf. Used a telephone survey to obtain key urban design issues in the community.

Tissue Analysis



What it is:

A technique that overlays a known and understood scale plan or aerial photograph of existing buildings, lots, blocks and street patterns onto a vacant site as a rapid means of generating design options. These plans, aerial photographs or maps are often referred to as an 'urban tissue'.

What it's useful for:

Rapid generation of initial design options for sites and neighbourhoods that promote informed design discussion. Because the density, activity and physical characteristics are known, measurable, and can even be visited, there is a degree of certainty about the feasibility and effects of different configurations of development.

How it's done:

Aerial photographs or plans of existing, known and understood buildings, lots, blocks and street patterns are manipulated and modified to achieve a best fit or a series of different options on a vacant site or neighbourhood. All the urban tissues used should have a clear purpose and be familiar to the designers or participants in the design exercise. This is a first step in providing design variation and assists in the generation of ideas and options for the transformation of an urban site. Ideally, urban tissue case studies should be developed that analyse in detail the design of a variety of different urban tissue.

Reference

- Hayward, Richard 1993. Talking Tissues. *In*: Hayward, R and McGlynn, S (eds), *Making Better Places: Urban Design Now*, 24–29. Explains how the Joint Centre of Urban Design at the UK Oxford Brookes University uses urban tissues as a educational tool.

Transportation and Traffic Modelling

What it is:

Specialised tools used by traffic engineers and transportation planners to plan, monitor and manage road and transport systems at a range of scales.

What it's useful for:

Predicting traffic flows, patterns, behaviours and all transport modes in an existing urban area, and for predicting the impact of changes to the traffic patterns as a result of adjustments to the distribution and intensity of urban land uses.

How it's done:

‘Multi-modal transport modelling’ uses computer simulation to predict transport mode use and shifts in car, bus, train, walking, cycling transportation and the origin–destination of trips. This provides important quantitative information on the predicted use of a city or region’s transport systems, and can provide vehicle information for traffic flow models.

‘Traffic flow modelling’ uses computer simulation to predict the traffic flow capacity and travel time implications of changed street configurations or uses within a complex street network. This provides important quantitative information on the predicted use of streets when major urban changes are proposed.

Example

- Greater Wellington Regional Council 2005. *Transit Western Corridor Transportation Study*: <http://www.gw.govt.nz/section1675.cfm>.

Urban Design Audit

What it is:

A systematic and comprehensive analysis of an existing neighbourhood, town or city that leads to the development of a design brief, strategy or code and the implementation of design projects. An urban design audit will involve use of a range of urban design research and analysis tools.

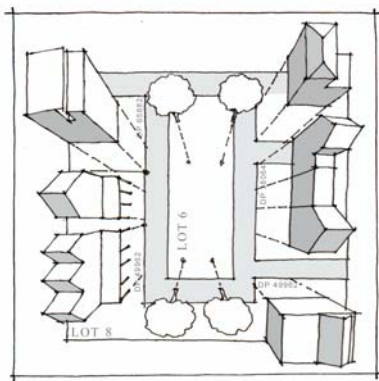
What it's useful for:

Providing extensive primary urban data through detailed assessments and analysis of existing urban environment qualities, features and characteristics. An urban design audit can be used to inform future design and policy initiatives.

How it's done:

Development of a clear research brief and the use of appropriate urban design tools to survey, check and analyse the urban neighbourhood, town or city. An urban design audit will involve quantitative and qualitative research and analysis.

Urban Morphology



What it is:

Analysis techniques used to study the present and past historical patterns of urban structure, form, land use and patterns. Provides an understanding of the existing physical form and structure of the urban environment at different scales, from individual buildings, lots, street patterns and blocks.

What it's useful for:

Defining urban patterns and characteristics that create a unique sense of place. It helps in the appraisal of successful and unsuccessful urban form, and can examine the processes that shaped past change, or features that persist in the present urban fabric. It can define urban boundaries, inform development controls, and form the basis for design guidelines for character and heritage areas.

How it's done:

Characteristics of an urban area, such as its buildings, lots, blocks, street patterns, open space, land use activities, and building details, are recorded, measured, mapped and analysed using existing and/or historical information.

At its simplest, the mapping of buildings and open space patterns or 'figure-ground mapping' is where the building footprint is blacked out with open space left blank on a plan. With this technique, the open space and other character features of the site can be analysed.

A 'typological analysis' classifies buildings, lots, streets, blocks or open space into typical or atypical types. Type is defined by a combination of plan, dimension and use characteristics. This information can be used in character studies, design development and urban design policy.

A 'materials and components analysis' is a detailed urban morphology study recording building and material details. This can define the character and inform design selection of future colours, materials and components.

References/examples

- International Seminar on Urban Form: <http://www.urbanform.org/>. Inaugurated in 1994 and seeks to advance research and practice in fields concerned with the built environment. It promotes conferences, publishes a journal, *Urban Morphology*: <http://odur.let.rug.nl:8080/isuf/template/journal/home.xml> and provides an international framework for communication between members.
- Urban Design Group Journal. *Urban Design 93, Winter 2005* issue on urban morphology. (Editors: Evans, R and Kropf, K.) See Urban Design Group website: www.udg.org.uk.

Walk-Through Analysis

What it is:

An assessment of urban qualities and design issues done by walking through an area and recording observations and impressions along the way. It uses mainly graphic methods for recording observations.

What it's useful for:

A walk-through gives an overview of the design issues, and is often the first stage of a more intensive appraisal that involves both qualitative and quantitative methods. This technique helps establish the extent of the design issues and identifies further work required.

How it's done:

Observational analysis of place that records the main features, both successful and unsuccessful, in a preliminary urban design assessment. Key findings are often recorded by graphic means such as photographs or annotated sketches and plans. Checklists are typically used to ensure consistency when appraising a number of buildings, streets or areas.