



Building Legible Cities 2
Andrew Kelly & Melanie Kelly

Bristol Cultural Development Partnership, 2003

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Building Legible Cities 2

Making the Case



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Foreword

Bristol Legible City (BLC) was launched in March 2001, following many years of development. New signage, maps, artworks and better digital information have helped residents and visitors find their way more easily, and better understand and enjoy the city.

Through development and implementation, we have tried to record and evaluate all aspects of the project. In making Bristol better, we were determined to ensure that we, and others involved in urban regeneration, could learn from our successes and failures. We also wanted to learn from others. We set up a research initiative, conducted in-depth evaluation – which is ongoing – organised seminars and conferences, and published reports and books.

This book is the second to be published on BLC. It is put forward as part of the ongoing debate about how to make our cities work effectively and efficiently for everyone. Like its predecessor, *Building Legible Cities*, first published in 2001, it brings together examples of theory with practical proposals. Once again, we focus on Bristol as this is where we work, though we accept that Bristol does not have all the answers. We believe case studies are useful for showing successes and failures, as well as helping others determine where they should go next.

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Bristol Cultural Development Partnership

There is growing interest in the role of urban spaces as places to live and work, as centres of culture, trade and education, and as destinations for leisure. Major capital developments are helping cities and towns prosper again. After a long retreat to the suburbs, city centres are once more places to live, though whether this will create real communities or chiefly provide housing for the affluent young and passing students, and an investment for the wealthy, remains to be seen. Fundamental problems of social inequality, ghettoisation, poor quality housing, inadequate public transport, and over-burdened health and education services have not been eradicated and cannot be ignored, but cities are making a comeback, as they become the hub of creativity, social diversity, innovation, and cultural and economic activity.

Consequently, cities are higher on the political agenda than they have been for some time. Though it is an overused term, there has been an attempt at “joining up and connecting”, even if this has not been altogether successful. Lord Rogers’ urban renaissance task force set a challenging agenda for renewal. Since then, the establishment of the Commission on Architecture and the Built Environment (CABE), the work of the Department for Culture, Media and Sport (DCMS) and the former Department for Transport, Local Government and the Regions (DTLR) together with cross-departmental working in The Better Public Buildings Group have seen good urban design and architecture placed firmly on government agendas. A broader social agenda has also extended urbanism to embrace the inclusion of otherwise disadvantaged and alienated communities.

Running through recent government-backed publications is a common thread: good quality design is critical to the success of urban renewal because of the added value it can provide. Design, like culture and cultural facilities, is recognised as having an impact upon a city’s ability to attract business and investment, to promote sustainable development, and to reinforce civic pride and a sense of place. It is becoming a source of competitive advantage for cities. And design – like quality in management terms – is ultimately free. CABE’s *The Value of Good Design* (2002) says that when measured across the lifetime of a building or place, good design does not cost more than poor design and is a wise investment in generating value in health care, education, housing, business occupancy and crime prevention.

A major objective of the present government is to reduce social exclusion, and promote equality of access. The democratic design of the public realm is a key element of this approach. Public participation in design decisions is also becoming more widespread. In *By Design* (2000), CABE states that ‘Urban design is the art of making places for people’¹ and in *Better Public Buildings* (2000) calls for community involvement in design initiatives and the promotion of a civic ethos. The DCMS report *People and Places* (2002), in raising awareness of the links between the built environment and social

inclusion, states: ‘A high quality, safe, welcoming public realm invites better behaviour from its users. It creates interaction between people and this leads to a greater sense of community.’²

The renewal of urban areas is not just a British experience. Indeed, inspiration behind the British revival has come from the regeneration of European cities like Lille and Barcelona and from North American cities. Referring to the US experience of urban neighbourhood revival, Paul Grogan and Tony Proscio believe that ‘the forces that can transform and rebuild inner cities are *already under way*’³ through a grass-roots combination of ‘neighborhood-based development, private capital, public order, and deregulated or decentralized service systems’.⁴ They believe that with residents in American cities taking greater responsibility for their environment and given the practical means to realise their dreams, an unprecedented regeneration ‘in formerly bleak neighborhoods’⁵ can take place.

Making those who live and work in towns and cities or who come to visit feel safer, more confident, more welcomed, more connected, indeed more included, is a guiding principle of legible city initiatives. And it has been the urban renaissance of the past few years that has increased awareness of the importance of the tools of legibility – arts projects, graphic and urban design, signage and maps, integrated transport, and electronic information – in helping people to move more easily, effectively and enjoyably through our urban spaces. As with good urban design generally, this can have a positive effect on a city’s citizens, economy, transport, culture, tourism, inward investment, confidence and civic pride. Legibility, therefore, can help make cities work. Indeed, we would argue that it is essential for city prosperity and life. It is our belief that legibility, applied thoroughly and across the board, provides the right inspiration, philosophy and delivery for the successful future development of cities.

Two years ago, we published *Building Legible Cities*. That book looked at Bristol, especially the challenges facing the city (and all cities); the work of Kevin Lynch, founder of the theory of legibility; the initial BLC work programme; the management of the project;

and the meaning of place. This book complements *Building Legible Cities* by focussing on the practicalities of making the case for legibility initiatives. It provides an update on BLC and looks at how to assess the impact of such initiatives.

Having been involved in the urban regeneration of Bristol over the past decade, developing large-scale cultural projects, working on BLC, and spending much time marketing the city, we are conscious that it is not easy to make change happen. In doing so, there is a need to pose fundamental questions, to engage with different disciplines and ideas, to consider all aspects of a city's needs and wants. Urban areas are complex. This is one of their great attractions, though complexity often demands complex and, sometimes, costly solutions. The questions that interest us include:

- Who are the users of a city and what are their different needs?
- Who, and what, can inspire city managers?
- How do you promote collaboration in city renewal?
- How do you evaluate a city and the work that it does?

Our focus is on providing the right information to help make successful change happen. Our aim is to make a contribution to the debate about the future development of cities so that we can create better cities. We move from vision and idealism to evaluation. Section two looks at legibility, particularly in terms of the many urban thinkers that have contributed to theory and practice. Section three investigates the progress being made with the development of BLC. As part of this work is about making a case, the final section is devoted to the evaluation of legibility initiatives. First, though, we look at the complexity of the city.

1

What are cities for? And who are they for? One of the challenges of managing cities – when resources are always limited – is deciding priorities. Some things are givens, whether that be education, social services, planning, refuse collection or libraries, though statutory responsibility does not necessarily mean quality services. Beyond this, choices have to be made. Should an emphasis be placed on attracting more tourists and business investment; should new cultural facilities be prioritised; and – as no city is perfect – what resources should be targeted at poorer areas?

In *Building Legible Cities* we said that it was only those cities that made themselves different that would succeed. To do this requires a transformation in the way we manage, market and develop cities. Cities have to learn from those that use them, and from the perceptions of those that do not. They have to be adept at building partnerships that work. They need to be creative, vibrant and exciting. They have to be socially inclusive: the plight of the urban poor can no longer be tolerated.

We need to return to first principles and look at the different types of cities, different city visions, different approaches to analysing city space, different ways of representing or presenting a sense of place. Finally, we need to identify the way cities are used by different groups of people at different times of the day and night.

City types

'There are many cities and many stories to be told' say Gary Bridge and Sophie Watson.⁶ The forces that have physically shaped cities have included topography, geology, climate, politics, war, political conflict, mismanagement and economics.

Kevin Lynch, founder of the legibility concept, wrote, for example, of cosmic, practical and organic cities. The layout of cosmic cities was based on symbolic representations related to specific rituals or beliefs, such as the mandala design found in ancient Indian cities. Practical cities were conceived like a commercial machine and often used a grid system, as can be seen in sections of Mexico City or in Chicago and New York. Organic cities, like medieval or Islamic cities or London, have the cohesion and balance of an organism with meandering rivers and pedestrian routes. Other types referred to in the literature include the jewel city, the historic city, the world city, the subjective city, the urban centre, the non-exploitative city, industrial cities, post-industrial cities, automobile cities.⁷

In Britain the rise of the modern city began with the Industrial Revolution. By the mid-nineteenth century more English people lived in a city or town than in the countryside. With the development of

the rail system and improvements to roads and canals, food and other essential resources could now be transported faster and more efficiently, enabling cities to grow. This rapid growth was largely unplanned, leading to disorganised sprawl. The poorer areas of the cities were often characterised by overcrowded, badly built, unsanitary living accommodation, and filthy streets. On the other hand, and for all but the poorest, industrialisation brought cheaper goods, improved hygiene and a more varied diet. There were more labour-saving devices and appliances, freeing some women from the confines of the home. Easier access to mass-produced written material encouraged the development of literacy, and investment in public museums, libraries and galleries by some visionary civic leaders and philanthropic industrialists encouraged an interest in learning as well as providing some of the finest buildings present today.

With the decline of traditional industries in the twentieth century, many major British cities lost direction, businesses failed, unemployment and social problems rose, buildings were left derelict and people moved away. The rush to the suburbs meant the end of city centres as liveable areas.

Regeneration schemes of the past decade have helped to find new uses for city sites and new ways and reasons for living, working and spending leisure time in the urban environment. While emphasising their historic roots as a source of inspiration, cities are looking to establish new, modern, positive identities to fit the demands and opportunities of the post-industrial age. The growth of city marketing – most notably to attract visitors – has seen an increase in cultural tourism.

The Core Cities group comprises eight English cities, of which Bristol is one, that are centres for regional development and activity. It is developing a new urban agenda that seeks to improve productivity, develop skills levels, and combat long-term unemployment and deprivation. One of the leading core cities is Manchester. Arguably the UK's first industrial city, it now styles itself as being at the forefront of these knowledge-led cities, aspiring to be the country's first ideopolis outside of London. 'Ideopolis', an American term,

is a city that uses the best drivers in its local metropolitan and regional economies – innovation, knowledge and skills – to become a knowledge capital keyed into globalisation. It aims to be inclusive and diverse, with strong leadership, political and economic autonomy, and with effective networks. Innovation and creativity, Manchester believes, has led to the vibrancy and distinctive buzz that makes it interesting and attractive, and this has been enhanced by the growth in its retail and cultural industries. By adopting the ideopolis concept, Manchester seeks to present itself as ‘a city where people with ideas, knowledge, spirit and skills choose to live’.⁸ It feels its urban capital is correspondingly high, as is the general performance of the wider metropolitan area.

City visions and city planning

The city has always engaged artists, writers and filmmakers. Though some comment on the alienation of the city, others provide inspiration in planning cities now. One of our favourite authors on the city is the American essayist Alfred Kazin. Kazin wrote about New York, the city that provided his education and his home and ultimately transformed his life. All city planners should read his book *A Walker in the City* and his late essay ‘The Art City Our Fathers Built’. Kazin loved New York’s cultural institutions. But what you get from his work is love for the city itself: what he discovered, learned about and enjoyed as he wandered and looked, and the sights, smells, sounds and memories he encountered along the way.

Why is New York such a great city? It is not just the galleries and theatres, the shops and the cinemas, the cafés and bars. It is not just the buildings, of which the skyline is justly famous, though sadly diminished by the tragedy of September 11. It is much more. Wandering in any city – and New York in particular – is one of the great pleasures, which no terrorist can destroy. It is the *experience* of the city – the *culture* of the city. It is the quiet and the noise; the street signs and the street art; the organised trip and the serendipitous discovery; the skyscrapers and the green spaces – the Empire State Building and Central Park.

Not all would share this view. It is the complexity, density, extremes, and abundance of sensory data that make cities threatening as well as alluring. Utopian city visions from Augustine, Cobbett, Gissing and others, for example, now appear to have been designed by those who essentially hated or misunderstood cities. Referring to this, Jonathan Raban writes in *Soft City*: ‘The ideal city gives us the authority to castigate the real one; while the sore itch of real cities goads us into creating ideal ones.’⁹ Anti-urbanism is also found in retrospective analysis of the work of Le Corbusier, Lloyd Wright and Ebenezer Howard who felt the city was ‘a place to be tamed and ordered and made predictable’.¹⁰ Le Corbusier’s plans were based on a centralised bureaucracy with no community involvement. Wright’s vision of homesteads with an acre of land linked into a community by the private car was realised as the anonymous sprawl of suburbia. Howard’s garden cities were a nostalgic, rural idyll.

In *The Culture of Cities*, Lewis Mumford wrote:

The city, as one finds it in history, is the point of maximum concentration for the power and culture of a community. It is the place where the diffused rays of many separate beams of life fall into focus...Here is where human experience is transformed into viable signs, symbols, patterns of conduct, systems of order.¹¹

Mumford used the image of the theatre of social drama to describe the city. He ‘saw the urban experience as an integral component in the development of human culture and the human personality’.¹² He had an unrealised vision to recreate the medieval city-states that he considered to be the height of urban culture using twentieth century technology. Raban describes Mumford’s approach as ‘a home-made stew of science, sociology, and bureaucratic administration...called, innocuously enough, town-planning’.¹³ Town planning, Raban believes, aims to solve the problems of the city using reason, rationalism and technics, which ‘seems intuitively wrong’.¹⁴ For Bridges and Watson, planning encodes the inherent contradiction of the city as a place of possibility and of threat:

The building of, and access to, public space (parks, baths, libraries) was one of the great achievements of the municipal revolution in many Western cities. Yet at the same time it instilled the idea that space had to be ordered and rational and that in some senses space itself was neutral.¹⁵

Representations of the city

Cities not only have a physical, material presence, 'they are also spaces of the imagination and spaces of representation'¹⁶ which are formed at the conscious and unconscious level. A variety of analytic methods have been applied to help understand and communicate the "true" meaning of the city. A Marxist, for example, might look at the city experience in terms of the alienation, exploitation and accumulation of the capitalist production system. A Freudian analysis might be interested in the division between the subjective and worldly experiences. A feminist might look at the city as the place of female opportunity and freedom from domesticity, or, by contrast, the place of patriarchal assumptions. Bridge and Watson write:

All these tensions – between imaginative innovation and constraint, between actualisation and remoteness, between the individual or the collective imagination – emerge not just in the effects of the city on imagination but in the way that the city is imagined, the way it is represented in film and literature, in urban scholarship, and in urban planning and politics...the boundary between real and imagined cities is difficult to draw.¹⁷

Nick Barley believes that 'the city has become more a territory for the imagination than one with a measurable physicality'.¹⁸ 'London is London because of flux,¹⁹ he says, rather than because of 'the notional 'heart of the city' peddled by tourist brochures'.²⁰ He writes:

Cities demand that we move through them – arrival is only the beginning – but great cities also make us stop...As much as the stop and start of buses and the arrival of commuter trains, it is the unceasing daily accumulation of these kind of encounters between

people, the city and each other, superimposed on the same static grid of streets, that gives the city a sense of fluidity, of being 'alive'.²¹

Raban refers to the plasticity and ambiguity of cities. He writes:

We mould them in our images: they, in their turn, shape us by the resistance they offer when we try to impose our own personal form on them...The city as we imagine it, the soft city of illusion, myth, aspiration, nightmare, is as real, maybe more real, than the hard city one can locate on maps, in statistics, in monographs on urban sociology and demography and architecture.²²

He also refers to the magical city 'where hobos and loners are thoroughly representative of the place, where superstition thrives, and where people often have to live by reading the signs and surfaces of their environment and interpreting them in terms of private, near-magical codes'.²³ He feels that 'the city is too large and formless to be held in the mind as an imaginative whole'.²⁴

M Christine Boyer suggests that the dramatic changes in the social and physical fabric of cities following World War Two, meant that intervention was now needed to restore the link between the spectator and the cityscape. She writes:

A good city form would have readable or identifiable nodes, paths, edges, districts and landmarks. Such readable symbols formed a "cognitive map" orienting spectators in space and time...But...in post war cities...the relationship between the spectator's perception of the physical structure of the city had been shattered and a "cognitive map" could no longer be based on direct experience. Some other device had to mediate between the two and render the city readable.²⁵

She goes on to examine the role of films and photographs in producing cognitive maps with an analysis of Jules Dassin's *The Naked City* (1948) and its depiction of a vanishing New York.

Similarly, in an article on a new 3D interactive map of New York, Erik Baard writes how music, paintings, films and people may capture a more potent sense of the city than the map has achieved. Referring to Piet Mondrian's *Broadway Boogie-Woogie* he says:

In that abstract painting, congested blocks of yellow, red, and blue jostle in tight lines, blending visual rhythm with coveted patches of openness. It's a mapmaker's hell, but it feels true.²⁶

Writing on place marketing and the need to draw out identity from the community rather than impose it, Chris Murray says: 'Imagery and descriptive text are essential items in the place marketer's arsenal...Artists, writers and other kinds of cultural producers can help us to see places and the way they are represented in new and different ways.'²⁷

Initiatives designed to create a positive identity for an urban space could also be regarded as types of representation. In the USA, for example, Business Improvement Districts (BIDs) have been hailed in some quarters for their revival of neglected downtown districts and their success in cleaning up city streets and reducing crime. However, they are not without their critics. Having examined the BIDs of Manhattan, Andrea Kahn concludes they are misrepresentative of the perceptions and experiences of the wider community. She writes:

BIDs are a forceful but skewed form of urban representation that overlooks the interests of anyone (or any group) that is not a major business or commercial property holder. Their improvements have a homogenizing effect – visually, at the level of everyday detail, economically, through particular types of commercial ventures, and socially, singling out limited groups of users.²⁸

From next year, following the launch of five pilots in central London, BIDs will be established in urban centres across England, including Bristol, and it is hoped that their social and economic benefits can be secured within a democratic public space.

City culture

There is also city culture to consider. A good cultural city is made up of creative people, creative organisations, creative companies and creative approaches to city management, business, work, life, learning and leisure. What is important now, according to Comedia, is the cultural assets of a city, as important as coal, steel and gold used to be, whether these be the hard assets of buildings and cultural facilities, or the soft assets of networks and connections. A creative city exploits and grows these assets. Government recognises this in such publications as *Our Towns and Cities: the future*.

American research published in 2002 takes creativity in city development in new directions. Richard Florida says that those cities that prosper attract the creative classes and turn these into 'new ideas, new high-tech businesses and regional growth'.²⁹ The creative classes are well educated, well paid, and work in a variety of jobs. They might be poets, novelists, artists; engineers and scientists; architects and designers; think tank researchers, opinion-makers. What they produce – products, thoughts, performances, creative problem solving – can be used in different ways. They are independent thinkers: the results of their work might not be readily transferable elsewhere, but nonetheless they are critical for financial services, legal work, healthcare, management. They value creativity, individuality, tolerance and cultural diversity – in the sense of trying different experiences, food and music. They like art galleries, performance spaces and theatres in neighbourhoods. Attracting members of the creative classes, and keeping them, is essential for city prosperity.

City users

We need also to consider the users of the city. Cities have many users – from residents who spend their lives there, through business people who visit to work, and tourists who visit for leisure. Each will experience something different and their needs are different. A tourist who has never been to the city before may need detailed information when they arrive. A business person, keen to get to an appointment, is likely to get their information prior to the visit.

A resident, who will know their way around better than a visitor, may demand other forms of information and interpretation. Different sub-sectors of these groups may need additional help: the information needs of a blind person or someone in a wheelchair will be different to others, just as visitors from overseas may have specific language needs. Finally, the needs of users at night may differ from users during the day.

The needs of each of these users have to be incorporated in any legibility system, hard though it is.

The complexity of Bristol

Lack of investment – and lack of thought about – signage had meant that finding the way in Bristol a decade ago was difficult. Clutter, often providing misleading information, and sometimes too much information, was a problem. But this was one of a number of issues facing the city, then and now.

Bristol is a historically important city. Its role in trade brought major wealth to the city, though some of this, as with many other European seaports, came from the odious trade in people. It remains one of the most important British cities, with a significant regional responsibility. It has aspirations to be the regional capital of the South West, and is investing heavily in its cultural infrastructure both as a regional centre and as part of its bid to be 2008 European Capital of Culture.

Like other post-industrial maritime cities, Bristol has faced many problems. The decline of the docks meant that much of the city centre was derelict for decades. Heavy bombing during the Second World War saw much of the central historic areas devastated, and what the Luftwaffe failed to do then, was achieved by post-war anti-city planners who destroyed traditional neighbourhoods and by transport engineers who widened roads within the centre. In recent years, the growth of out-of-town shopping has threatened to have further impact on the usage of the city centre.

A serious problem was travelling to and around the city. Many major routes were suited more to the horse and cart than modern vehicles and some of the great attributes of Bristol, including its rivers and harbour, were – and are – problems when planning transport improvements. Five years ago, vehicular and pedestrian signage was inadequate, much of it redundant and old. Car usage was high, and not sustainable, public transport poor. Bristol's two train stations are based outside the city centre, and the bus station offers a uncomfortable environment for travellers.

Hard though it is to believe now, when the city has enjoyed some years of economic success, in the late 1980s Bristol was facing the ignominy of becoming the first high-tech city to go into serious decline. Since then, there have been better economic conditions and, more importantly, a renewed sense of purpose for Bristol embracing public, private and voluntary sectors through partnership working. By the early 1990s, Bristol City Council had abandoned the parochialism that had characterised much of its life. The completion of College Green, in which a road had been removed to create a space linking the cathedral with the council house, key developments in Harbourside, which created a new cultural heart of the city, the growing popularity of the city centre as a place to live, Bristol's development as a destination for tourists, and new forms of public consultation, created a better city for many citizens and visitors. Even public transport, for so long a problem, had improved to the extent that in 2002 Bristol was ranked sixth in council transport performance, well above average.

Some elements of the city's fabric could not be changed, and should not be changed, such as the harbour. What was needed was to embrace the diversity of the city through a clear visual identity to bind the disparate parts of Bristol together. By the mid-1990s confidence had increased to the extent that new initiatives, such as BLC, could be considered. Before BLC, though, a discussion of legibility.

2

Decades of neglect of the public realm have made cities illegible: bad signage is the norm, there is little unique about the signs that we have, and maps – like many signs, in fact – are purchased off the peg, imposing a uniformity that adds little to better movement nor to a sense of place.

Some cities have good information systems; others are unusable. Both the good and bad examples add to our knowledge of legibility. Once you know what makes up even the most rudimentary parts of a legible city, the failure of other cities is clear: a trip to Manchester – a city outstanding in other ways – uses old style maps, making wayfinding difficult; Glasgow’s much vaunted signage system, introduced as part of the 1999 Year of Architecture and Design, now seems old fashioned, with small print, and is showing its age badly, even though it is little more than four years old. There seems to be clutter everywhere. And how many of us find a city trail, only to see it badly maintained with no publicity or information?

Legibility is a key basis for city prosperity. Applying legibility can help cities rethink how they present themselves, how they communicate and how they trade on their differences. The modern urban space can be visually overwhelming and confusing to move through, particularly for the pedestrian. In these competitive times, a successful city will be one best able to connect people, movement and places efficiently. Legibility initiatives aim to link urban users to their destinations in a complete movement and information system, thereby making cities accessible, welcoming and easily understood. This is where much of the Bristol work lies at present.

Legibility is more than this, however. It is also a philosophy for city development and management. Adopting legibility principles is not only good for helping residents and visitors find their way. The collaboration needed to develop legibility initiatives can lead to creative innovation in other areas. Extensive consultation – itself part of the creative process – engages greater numbers of people in city development. Ultimately, a legible city leads to civic pride, itself a key factor in city success.

Making cities legible is one of the key foundations of government policy on urban design in town and cities. CABE’s report *Paving the Way* (2002) included, in its six criteria for better city streets, visual simplicity and an absence of clutter: two legibility principles. The Brookings Institution Center on Urban and Metropolitan Policy including legibility in its *Ten Steps to a Living Downtown*:

A “legible” downtown is one with delineated and distinguishable boundaries. Neighborhoods are created in many ways – ethnic or religious concentrations, similarity of architecture, landmark buildings or landforms. Comprehensive plans, common streetscape furniture or good signage can give a neighborhood definition and cohesion.³⁰

Initiatives that have taken place over the past decade show what is possible. In Germany, MetaDesign, later to be involved in BLC, introduced a communications system for the Berlin underground. Signs have been placed at decision points: if no alternative path is offered, no sign is needed. The only exception is the confirmation sign that follows a complex intersection. This accords with legibility’s principle of delivering the right message at the right time. Any additional information, for example tourist destinations or access for disabled people, is kept separate from the basic navigational information. Signage is clean, unmuddled and in a legible type. Erik Spiekerman was the inspiration here.

Per Mollerup designed the signage system in Copenhagen Airport to aid understanding and to avoid information overload. Dark blue sign plates provide high contrast to the white walls and white and yellow letters, numbers and pictorial signs. Buses between terminals are in the same colour scheme with clear information on the back about route, frequency and price.

The connected city approach to making cities work more effectively includes legibility in an action plan for connecting the people who shape a city or neighbourhood to its fabric and movement system. The checklist states: ‘Launch a *legible city* or legible neighbourhood initiative, helping to create a clear image of the place by means of signage; interpretation of buildings and spaces; routes; the creation of distinct quarters; street furniture design; public art; publicity; and marketing.’³¹

MetaDesign, Mollerup and Robert Cowan (*The Connected City*) have contributed much that is of value in developing more legible urban areas. Many disciplines have also contributed to thinking – environmental graphics and environmental psychology, design theory

and information planning. In addition, the work of Common Ground in promoting local distinctiveness in place making, and the success of some American cities in developing city neighbourhoods, has been important, as have visiting and looking at many cities around the world.

In this book, we point to eight people who have had direct and indirect influences on the development of BLC, even though some of these would not necessarily use the terms “legibility” or “legible city”.

Frank Pick

Frank Pick’s work with London Transport had a profound effect upon the development of the city. Reflecting on what had inspired him to become a planner, Peter Hall, author of *Cities in Civilisation*, among other books, spoke of the lasting impact of experiencing London’s underground in the 1930s, which ‘made an impression of power, of simplicity, that was overwhelmingly the magical memory about my childhood’. He goes on: ‘Pick really was the person who, more than any other, totally transformed the way we live in London, and created the London we know.’³²

In his modernisation of the existing underground stations in the 1920s, Pick broadened the entrances to increase visibility of the interior for the passer-by and provided more stairways and designated pathways to increase customer flow. Stations were to be inviting doorways through which to welcome customers. The now familiar roundel identification device was put on windows and on wall mounts, and this device was later used in his work on the city’s bus stops, with colour design variations to designate Request and Regular stops, and types of service. Everything was made with attention to detail and to the highest quality. He commissioned calligrapher Edward Johnston to devise a new alphabet for the signage system; Paul Nash and other artists to design seat fabrics; Eric Gill, Henry Moore and Jacob Epstein to create contemporary sculptures for the company headquarters that were designed by the award-winning architect Charles Holden who built Bristol’s Central Library.

Pick’s biographer, Christian Barman, says that ‘Everywhere Pick was searching for new ways of doing things, and particularly ways of tightening design discipline and bringing a great wholeness of order into the completed work’.³³ He goes on to explain Pick’s approach to signage:

Pick held strong views about road signs. He was one of the first to lay down that all information that could be conveyed through symbols rather than words should be so conveyed; people in the streets should not have to stop to read things if there was a simpler, quicker way of delivering the message. But the symbols must be clear, unmistakeable, to the point. Nothing was more odious to him than a symbol designed as an eye-catcher and devoid of useful content.³⁴

His vision for London’s transport responded to the needs of bus and train passengers, pedestrians and other road users. He was fair minded, principled and strategic, as is demonstrated by his *New Works Programme 1935-1940*. Pick was also interested in the planning of cities. He believed ‘The growth in...early times had been the result of a creative response to local circumstances; it had been of the same kind as the growth we see in nature. But today we are living in a new world’³⁵ that requires conscious design.

Kevin Lynch

Legibility was a key concept – but not the sole interest – for Kevin Lynch. Lynch, a former pupil of Frank Lloyd Wright, drew on the humanities and psychology ‘to understand how people perceive their environments and how design professionals can respond to the deepest human needs’.³⁶ For him, the city was a ‘work of art, fitted to human purpose’.³⁷ He believed that ‘a good environment supports purposeful behavior: it makes a good *fit* with user actions’³⁸ and that ‘the ideal environment is one controlled in all its essential respects by those who use it’.³⁹ He argued that a ‘prerequisite for intelligent and enjoyable behavior in the street’ was ‘to make the environment conceivable to the “man in the street”’.⁴⁰

Lynch wrote: 'A place must not only fit the structure of our bodies. It must fit the way in which our minds work: how we perceive and image and feel. This may be called the *sense* of place.'⁴¹ Lynch used the term "sense" in the context of place to mean: 'the clarity with which it can be perceived and identified, and the ease with which its elements can be linked with other events and places in a coherent mental representation of time and space.'⁴² Sense was not understood first and foremost by an analysis of the physical environment but began by a consideration of 'the images and priorities of the users of a place'.⁴³ Three components of sense – congruence, transparency and legibility – described 'explicit connections of settlement form to nonspatial concepts and values'.⁴⁴ At a deeper level of connection was 'the expressive or symbolic significance of a place'.⁴⁵

Lynch saw the urban environment as a medium of communication that used explicit and implicit symbols or signs to provide useful and interesting information. He wrote: 'This is a component of sense that we might call legibility: the degree to which the inhabitants of a settlement are able to communicate accurately to each other via its symbolic physical features.'⁴⁶

As the environment is 'an enormous communications device'⁴⁷ it is constantly being read by people, be they 'the anxious tourist, the knowledgeable inhabitant...the casual stroller'.⁴⁸ 'Temporal legibility is as important as spatial legibility', and the city that has left its history visible and whose layout is easily understood 'is better than one that is chaotic or has destroyed its past'.⁴⁹ People look for different clues to understanding, but 'the identity and legibility of places provide a common visible base to which all people can give their own interpretation'.⁵⁰

The metropolitan pattern was perceived by Lynch as 'an imageable region, composed of vivid differentiated elements, legibly organized'.⁵¹ The physical elements that make a space legible are:

- Paths – the channels of movement such as streets, railway lines, canals, airways, pavements.
- Nodes – the major centres or focal points.
- Landmarks – the points of references.
- Edges – the linear elements.
- Districts – the recognisable sections which have a particular character (and an internal legibility).

There were wider implications of developing legibility according to Lynch. 'Legible structure has an obvious value in facilitating the practical tasks of way-finding and cognition, but it has other values as well', he argued:

It can be a source of emotional security, and one basis for a sense of self-identity and or relation to society. It can support civic pride and social cohesion, and be a means of extending one's knowledge of the world. It confers the esthetic pleasure of sensing the relatedness of a complex thing, a pleasure vividly experienced by many people when they see a great city panorama before them.⁵²

Gordon Cullen

Gordon Cullen, the urban theorist and graphic artist, developed his views on what he termed "the art of environment" in *The Architectural Review* and later in his book *Townscape*. He wrote:

The environment is put together in two ways. First, objectively, by means of commonsense and logic based on the benevolent principles of health, amenity, convenience and privacy...The second way is not in opposition to this. It is a fulfilment of creation by employing the subjective values of those who will live in this created world...Both these attitudes are complementary.⁵³

In his work, Cullen addressed notions of possession, “hereness” and “thereness”, the interplay between the known and the unknown, linking and joining, and the various modes of relationships between buildings, objects, activities and spaces. He was interested in the human scale of towns and cities and therefore analysed the urban experience from the perspective of the people on the street. From this he sought to establish the experience’s fundamental components. To capture what he termed the “serial vision” of the city, he used a technique of sequential drawings which offered an unfolding succession of views of related spaces.

Writing of Cullen and the townscape movement, Joseph Rykwert says: ‘Insistent on the continuity of the urban fabric...[the] teaching had a picturesque slant and presented the city as a selection of episodes; the lack of response to social or economic reality condemned it – for all the valuable things it had to say – to a local role.’⁵⁴

Francis Tibbalds

Francis Tibbalds, the former president of the Royal Institute of Town Planning who did much to popularise the subject of urban design, believed that ‘Good urban areas are *legible* – they can be understood or read like a book’.⁵⁵ Among his recommendations for approaching legibility within the design process he suggested: sequentially linking spaces; clearly identifying the function and entrance to individual buildings; providing a clear structure of transport nodes (gateways), movement systems and landmarks; creating streets and buildings that were well-lit and busy at night; and having views towards memorable and interesting features. His concern was to improve the public environment for the benefit of its users, particularly the pedestrian.

With signage, he believed that if the arrival point was well connected to the rest of the city centre it should be understood without signs and maps. The more legible the environment, the less signs were needed. Similarly, roads and buildings should be planned to ‘make it easier for pedestrians to find their way around, without resort to extensive signage’.⁵⁶

Jan Gehl

The architect Jan Gehl is concerned with public spaces and those who move through them. Like Lynch and Cullen, Gehl starts with the user. He writes: ‘The character of life between buildings changes with changes in the society situation, but the essential principles and quality criteria to be employed...has proven to be remarkably constant.’⁵⁷ Activities in public spaces can be necessary, optional or social, depending on circumstance, and involve a range of different contact forms from the low to the high intensity. Public spaces are used for walking, standing, sitting, seeing, hearing and talking. Planning decisions can ‘influence patterns of activities...create better or worse conditions for outdoor events...create lively or lifeless cities’.⁵⁸ It is therefore essential, Gehl believes, that those responsible for the design and management of the public realm understand and respect the everyday needs of the people who use it.

Jane Jacobs

Jane Jacobs taught us much about the city. She advocated personal observation: to look at real cities not imaginary ones. For Jacobs, successful cities were varied and safe. ‘Think of a city and what comes to mind?’ she says. ‘Its streets. If a city’s streets look interesting, the city looks interesting; if they look dull, the city looks dull.’⁵⁹

In cities, strangers are more common than acquaintances. To be safe, a city street needs to be equipped to handle strangers with a clear demarcation between private and public spaces, and a healthy supply of activity, interest and watchful eyes. In *The Death and Life of Great American Cities*, Jacobs gives a wonderful description of the encounters which took place every day on her Greenwich Village street (she left in the late 1960s and lives now in Toronto). All those little public contacts build up an assumption of support and trust without invading personal privacy. City living needs sidewalk life and public characters who provide connections with others.

Richard Saul Wurman

Richard Saul Wurman is an information architect concerned with the function and performance of graphic design, rather than its style. He has written about 'dealing with the pressure to absorb more [information] than we are capable of' and has produced a series of accessible city guides that reflect 'how a person might feel encountering that streetplan, its spaces and its buildings'.⁶⁰ He is concerned with redistributing access to information as information is power and he judges design on the basis of whether it communicates successfully or not. His is an objective approach to graphic design based on logic and understanding. He aims to make order out of chaos, 'To familiarize the unknown'.⁶¹

This is in accord with Lynch's approach to legible signage. 'In a complex and mobile world,' Lynch wrote, 'many messages must be carried by contrived symbols...It should be our objective to enhance those beneficial powers – not to suppress, but to clarify and regulate, even amplify, this flow of information. Therefore the designer is concerned that signs be accurate, rooted (that is, located in the same space and time as the thing to which they refer), and intelligible – in other words, that they communicate well.'⁶² This differs from a more aesthetic, subjective approach to graphic design that would want to show the familiar in unexpected ways and 'defamiliarize the ordinary'.⁶³

Legibility can be criticised for what is seen as its over simplification and, hence, misrepresentation of the complex urban space, features of which were discussed in section one. It is criticised, too, for taking away the serendipity of city discovery. However, it is a valuable concept with which to address movement and information systems, accessibility, and the development and management of urban spaces, as well as delivering wider benefits to society. This is demonstrated in the BLC initiative which we examine now.



High Life project (John Martin Photography)



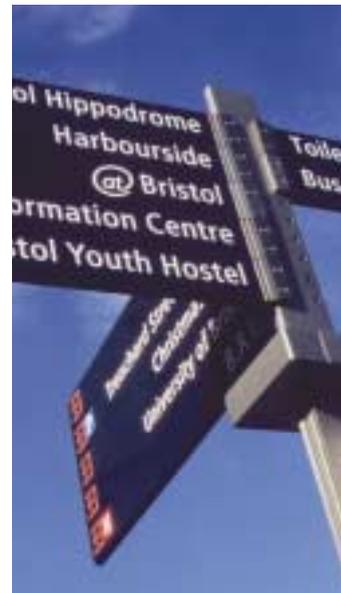
Team behind walkie-talkie (Martin Chaney)



BLC signpost

BLC on-street map in Anchor Square (Maria Moore)

Artist's design for Bristol Bridge (Visual Technology)





Bristol Bridge full design (Visual Technology)



BLC signpost



BLC advertising of Treasure Island - the Great Reading Adventure (Stephen Morris)

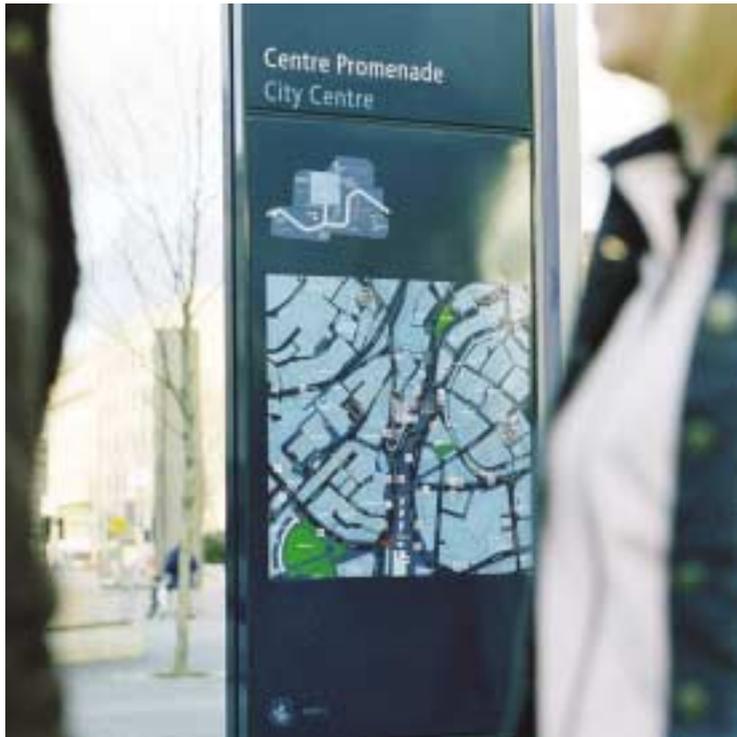


End of walkie-talkie (Alan Russell, Zed Photography)

High Life project (John Martin Photography)



BLC on-street map detail (Maria Moore)



BLC on-street map in Centre Promenade (Maria Moore)



walkie-talkie (Alan Russell, Zed Photography)

Pero's Bridge



BLC plaque (Stephen Morris)



3

In *The Seduction of Place*, one of the best studies of the city in recent years, Joseph Rykwert said that no-one had developed Kevin Lynch's pioneering work. Given the extent of Lynch's proposals, implementation would never have been quick, though Bristol has tried to create better legibility in an ongoing programme of work. This chapter covers briefly the Bristol work – from the very beginnings of the project through implementation of the first phase to future plans. Again, we wish to show how to make projects happen.

BLC has always adopted a multidisciplinary approach to research and development – bringing together the work of planners, urban designers, transport. This is not unusual in a local authority but what was different at the time work began on BLC was extending the project’s development to designers and artists and other interests outside the local authority. BLC brought together the first multidisciplinary project development team in a British city working on movement and information.

The early success of Bristol’s new public/ private partnerships and the new sense of purpose for the city, helped too. BLC was operating in an environment conducive to multi-sector project development and longer term thinking: it had an opportunity to innovate and the will for delivery was present.

Early work

Much of the original development and thinking for BLC came from three city officers, Alastair Brook, Andrew Gibbins and Mike Rawlinson, two of whom were later to work on the project in their own consultancy, City ID. Newcomers were important too: in fact it has generally been those who have moved to the city – or who have emerged as leaders from outside of the normal structures – who have provided much of the recent thinking behind change in Bristol. Leading design companies, MetaDesign and PSD Associates, worked on the BLC image and the range of street furniture. Overall artistic direction was provided by FAT – Fashion Architecture Taste.

Early tasks included auditing city movement, identifying users and needs, wider research into city movement and identity, the creation of a font for use in BLC initiatives – Bristol Transit – and the adoption of a BLC colour, blue. The city centre was split into different neighbourhoods, such as Old City and Redcliffe. New maps were also designed – heads up, rather than north facing. Following an agreement with Adshel, the investment was found to install new pedestrian signs and maps across the centre area. Some of this was paid for by allowing extra advertising housed in specially-designed BLC monoliths and drums; some advertising space has been provided

free of charge to community initiatives and for public information. Campaigns that have taken advantage of this include Bristol 2008, the city council’s change programme in education and the 2003 Great Reading Adventure, *Treasure Island*.

Sam Gullam, a product designer working on BLC, has assessed the impact street furniture can have upon the experience and enjoyment of a place. Functional street furniture (for example, bins, benches, telephones, bus stops) should be available when needed but must not create clutter or obstacles. In addition, when a coordinated design for street furniture is introduced across a city, the unified look must not disregard the distinctive character of individual districts. Consistency and continuity is important, however, when the furniture is part of a communication system that conveys information to guide and assist people’s movement. A uniform communication system, including graphics, nomenclature and product positioning, can create a strong visual identity while allowing discrete individuality. The components of the BLC products, Gullam says, were intended to take a general view of the city’s character. Enduring quality is also important and materials have to be robust and products well maintained so that the users have confidence that the information conveyed through the signage is current.

At the same time as the first elements of the BLC system were installed, electronic information about the city was renewed. The Bristol Tourism and Conference Bureau (BTCB) website was redesigned and used the new font, and 18 I+ kiosks were placed across the city, allowing users to send e-mails and gain access to city information, helplines and news headlines. A large electronic screen was placed in Broadmead shopping centre in 2002 which intersperses adverts with public information.

Following the ideas of Jane Jacobs and others, those working on BLC started to make the city’s streets more interesting. Bristol has had a long history of commissioning public art and BLC actively promotes the integration of the work of artists within regeneration schemes throughout the city, involving them at the earliest stages of projects. Council arts implementation officer Jonathan Banks aims to engage

artists in the creation of a built environment that contributes to the city's well being and sense of place.

A 600 metre long poem, called *walkie-talkie* by local poet Ralph Hoyte, was printed on blue tape and placed across the centre of the city on pavements, bars, even on the ferry boats. Another completed commission was *Edible Playscape*, in which artist Nils Norman converted a city centre roundabout into a community allotment within which was sited a large sculpture called The Monument to Civil Disobedience. A follow-up project called *High Life* saw eight artist-designed bird boxes placed in the trees of Queen Square. Projects currently being developed include *Pedestrian's Friend* and *City Gates*, artworks that explore the experience of being a pedestrian in the city centre and the contemporary significance of the city's historical gateways. FAT has been commissioned to design the deck of Bristol Bridge and during summer 2003 the Independent Artist's Network will present *dialogue*, temporary artworks and interventions at sites around the Floating Harbour. Public art and urban design will also have a place within cycle ways and private sector developments.

The first phase of BLC ended with the publication of a new walking map of the central area (as well as Clifton) in a print run of 600,000, the creation of new street nameplates, now placed on walls, not on the streets, and the launch of a new plaques programme. The result was a system across the city centre that was easy to use and distinctive.

BLC: phase 2

The second phase of BLC, now in operation, will extend the system to other areas and users, and upgrade electronic information systems. The maps and signage system will cover areas of Bristol beyond the centre, a cycle signing strategy is ready to be delivered once funding is secured, copyright-free 1:5,000 maps will be available soon, through a partnership with Ordnance Survey. A second-generation I+ system began to be installed in early 2003 with 10 new sites and renewal of others offering faster connection through broadband. One extra link among many was the ability to see arrival and departure information from Temple Meads Station.

Exhibit 1 summarises the overview of the framework concept for the continued development of BLC, October 2002 - March 2006 developed by City ID. Though implementation of the ambitious programme is dependent on budget, it is worth looking at the proposed work in total.

Exhibit 1 BLC framework concept, October 2002 - March 2006

Theme	Projects
1. Before you arrive	Interactive mapping suite; web based journey planners; tourism and transport publications.
2. Welcome	Staffed welcome points; welcome walking map; welcome walking map – large print; transport related welcome guide/ maps; transport information display panels; welcome point signs.
3. Making a day of it	Tourist Information Centre; integrated travel and visitor information points; BTCB pocket guide(s); poster campaign.
4. Finding your way around	City centre pedestrian signing phases three and four; city centre public rights of way; city centre street name plates; I+ journey planner; heads up maps for city centre bus shelters; audible signs; cityways and greenways (masterplan to citywide); interim tourist attraction vehicular signing; new vehicular signing system; public transport identity and information projects; legibility framework (city centre).
5. Experiencing Bristol	Arts strategy and framework; cityways and greenways (city wide and city centre); City Gates; clutter reduction.
6. Communication	BLC website; BLC events (April 2003 conference); publications and exhibitions.
7. Project development and management	Business planning and funding; strategy and design management; distribution and ancillary services; project evaluation.

Source: City ID/Bristol City Council, 2002

BLC has continued to adopt the principle of collaboration and innovation. The contract for phase two was won by Placemarque, a London-based company specialising in urban identity, wayfinding, and graphic and information design. Placemarque's projects include an award-winning identity and wayfinding scheme at Greenwich town centre and World Heritage Site, a new identity and wayfinding strategy in Canterbury, and a branding initiative for Walthamstow town centre.

The BLC brief was to maintain the existing family look and feel of the system, while providing simpler, cost effective solutions for the needs and characteristics of areas beyond the city centre, namely Southville, Bedminster and the Blaise Castle Estate. It is envisaged that following this pilot, the chosen solution can then be extended to other outlying city districts with the flexibility to respond to each specific locality.

The largely residential areas of Southville and Bedminster in south Bristol are separated from the city centre by the River Avon. This has enabled them to develop their own distinctive identity but has also limited access to the growing prosperity of central Bristol. Therefore, the crossing points of the river are recognised by Placemarque as being critical nodes. 'Movement to, from and through' them has to be made clearer and more easily available, they believe. In addition, it is desirable that access to the retail, education and residential locations within these areas is made less haphazard, with footpaths providing comprehensible direction and identity. Unlike the city centre system with its reference points of historic landmarks, the system in Southville and Bedminster is likely to lay 'greater emphasis on community related guidance'. Cycling also needs to be encouraged through such steps as the provision of 'high quality, safe, convenient, efficient, attractive, legible and integrated pedestrian and cycling facilities and infrastructure based on a clear definition and understanding of preferred destinations and routes'.⁶⁴

Blaise Castle Estate, an historic park, is five miles north west of the city centre and mainly visited for leisure purposes. Legible wayfinding is needed to achieve ease of movement through the grounds to the various attractions, thereby maximising visitor enjoyment.

Placemarque intend to hold a series of meetings and workshops as part of the consultation process, focusing on key decision points and making use of local knowledge and expectations. The stages of implementation they anticipate are laid out in Exhibit 2:

Exhibit 2 Placemarque implementation framework

Stage One	To include
General analysis (weeks one to two)	Site visits; audits to assist with identification of local characteristics and understanding of local identity; examination of family elements of existing system.
Southville and Bedminster, and Blaise Estate analysis and concept design (weeks three to six)	Meetings with local representatives to review key arrival and departure points, centres and characteristics; preparation of wayfinding storyboard; preparation of family component concepts; preparation of outline of maps and list of places to be signed; preparation of initial costings.
Southville and Bedminster, and Blaise Estate design development (weeks seven to nine)	Further meetings with representatives; development of draft context mapping to confirm content and format; development of concept design components; development of design elements in relation to key orientation points and locations; development of basic outline models; looking at procurement options; developing draft wayfinding layout.
Prototypes (weeks eight to 12)	Working with chosen manufacturer on preparation of prototypes for site testing.
Stage Two	To include
Southville and Bedminster, and Blaise Estate final detailed design	Development of design in detail following feedback from prototype testing; preparation of final wayfinding layout; preparation of artwork for final context maps and master artwork for all map variations.
General final issues	Agreeing procurement route; preparation of detailed cost breakdown; setting out implementation programme and guidelines for future phases.

Source: Placemarque/Bristol City Council, 2003

Widening access to the system

Work is also underway to ensure that the existing system can be used by all sectors of the community. In *People and Places*, DCMS pointed to the need to make architecture and urban design initiatives socially inclusive. Those responsible for the public realm need to think about the groups and communities they wish to engage with, review current procedure and develop new strategies. BLC is working on two areas currently: making the signs useable by blind and visually-impaired people and those with reading difficulties, and conducting research work with artists to ensure those with learning difficulties and without homes can find the system of benefit too.

In August 2002, city council officers began to investigate the potential of fitting audible signs into existing BLC on-street map units. The Joint Mobility Unit (JMU) carried out an Audible Signs Scoping Study in 1999 and had recommended the Royal National Institute of the Blind (RNIB) React II System that offers up to eight channels. The user carries a remote trigger card, available free of charge to those registered as disabled, which activates a pre-recorded message on approaching the unit. The trigger is then used to individually activate the other channels, which can provide messages of varying lengths and in different languages. Messages can be updated easily and could include tourist information and arts' projects, a poem for example, and interpretation material on the area where the sign is situated. The volume is set at a level suitable for the surrounding noise levels. Though some changes are needed to the BLC units – the existing top panels have to be replaced with perforated panels and a cable has to be connected to each panel – it is a cost effective system with a typical life span of eight years, and is maintained annually by the RNIB.

Further consultation with potential users has been carried out in conjunction with the Access Advisory Task Group, the RNIB and the Royal National Institute for Deaf People. To date this has focused on the type of message to be used. This could either be one that gave onward directions or, as proved more popular, identified a place ('You are outside Marks and Spencer', for example) so the user would

know where they were on their journey. A pilot scheme of 20 sites has now been introduced which is currently undergoing evaluation.

Art + Power, a group of artists with learning disabilities, already working on a number of projects with Bristol City Council's transport officers, are working with Arnolfini on a project to identify how they use the system to get from home to the arts centre. This project culminates with the writing of a review of an Arnolfini production. Artists without Homes, also working with Arnolfini, is making a film about their place in the city. These projects continue to adopt the BLC principle that artists should be involved at every step of the way. BLC has also been the inspiration for a new festival of the city in Bristol, looking at the vibrancy of city living and life, city politics, and the city in film and literature. From a small beginning in 2003, it is hoped that this will grow to become an annual event.

VIVALDI and other transport initiatives

BLC has sought to influence the development of public transport in the city. Clear journey planners are now available on some buses. The use of technology is particularly important. VIVALDI is a transport project, part-funded by the European Commission, which runs from 2002 to 2006. Bristol City Council is working with four European partners (Aalborg, Bremen, Kaunas and Nantes) and four local partners (Bristol Dial a Ride, Sustrans, First Group and the University of the West of England) on a variety of measures which embrace key themes of the city's transport strategy. An initiative that focuses on the use of innovative technologies to improve the provision of travel information is of particular relevance to BLC. One element of this is an internet-based inter-modal trip planner covering local bus, rail and ferry services, cycling and walking which will go live in mid-2003. Another will be the development of new transport information content for use on the I+ system, launched in April 2003, with a journey planning facility available later.

Bristol's past and legibility

One other aspect of making an area legible is learning about the past. The Czech writer Ivan Klima said in 2002: 'To love a city is to know its history, to know the fates of its outstanding citizens, to know not only its famous churches but also its little corners, its parks, its hidden secrets.'⁶⁵ Current practice in development control in Bristol City Council emphasises the importance of legibility in design both in terms of landmarks and the relationship to existing and past urban form.

There are wider initiatives. Bristol is a city that has always been interested in its past. Local publisher Redcliffe Press celebrated the publication of its 150th book about the city in 2002 with a volume on the public art of Bristol. Other books have been published recently on the history of Queen Square, some of the buildings involved in Bristol's annual Doors Open Day, and on the history of the Braikenridge Collection – many hundreds of drawings and paintings showing Bristol just before the invention of the camera. Bristol's Great Reading Adventure saw Robert Louis Stevenson's *Treasure Island*, key scenes of which are set along the Bristol quaysides, read by thousands in the city with the associated reading guide and events helping to inform participants a little more about the city's history. All publications are well designed, illustrated throughout, and most are in full colour. Many use the BLC font. Legibility principles are also informing the production of the new Pevsner guide to Bristol. Future initiatives include a year of celebration of the life and work of Isambard Kingdom Brunel in 2006, for the bicentenary of his birth and a year of remembrance of slavery in 2007 to celebrate the abolition of slavery 200 years before. Both will include trails, arts projects, publications, among others, all using legibility principles.

Plaques have also played a role. Normally civic plaques are devoted to the great and the good. Many are irrelevant – sometimes only commemorating the fact that a person stayed in a place for a short time – and after a while become dirty and illegible. Some are also misleading. Bristol's new BLC plaques programme honour the great, the good, but also the unknown or forgotten, and the significant

event. And each is designed to provide information about the history of the place. Designed in Bristol Transit, in blue, 29 have been placed so far. People and events commemorated include the birthplace of Bristol's aerospace industry; the pub in which Thomas Clarkson first began to research his attack on slavery; artists and popular entertainers including Russ Conway, Dame Clara Butt, Michael Redgrave, Isaac Rosenberg and Paula Vezelay. Even Nipper the Dog, of His Majesty's Voice fame, has a plaque. Eventually, this system will offer the potential for trails and walks.

Have any of these initiatives worked? Having described the various elements which have made up the BLC initiative and which are planned for the future, we now look at their evaluation.

4 Evaluating Legible Cities

4

Given the long-term nature of BLC, and the level of investment, evaluation has been an important part of the management of the project. Evaluation needs resources – and determining the methodology for evaluating legibility initiatives has proved especially time-consuming. Nevertheless, progress should be assessed. Evaluation informs organisational learning, monitors results, achieves organisational effectiveness, promotes legitimacy, demonstrates accountability, motivates staff, builds stakeholder consensus, identifies problems, assesses alternative solutions, guides strategic planning and promotes further investment.

What is evaluation?

Evaluation is a research-based activity that gathers data in order to appraise something and thereby learn how to make meaningful changes. This can entail looking back over a project in order to produce a credible, retrospective statement on what difference it has made (summative evaluation) and looking forward to make a reasonable prediction of what a project can achieve in the future and to identify the most reliable means by which to achieve it (formative evaluation).

Different levels of data collection and data use are required for different purposes, and effective evaluation is user and situation dependent. Ideally it should be informed by meaningful performance goals set at the outset of an initiative, but it will be continually refined in response to changing perceptions, assumptions, needs and expected outcomes. The true value of an evaluation exercise is not the accumulation of the data but the knowledge that is gained from it and the changes that are made as a result.

There can be resistance to undertaking evaluation: a reluctance to invest further in a project that is seen to be finished, a suspicion that evaluation is a process imposed upon staff as a means of control, and a lack of understanding as to how it can be applied to a particular situation. There is also an assumption that evaluation is a profession unto itself, requiring specialist knowledge and jargon. There is no mystery and should be no fear about evaluation, only a need to adopt a systematic approach to its implementation that is appropriate to the circumstances and that engages and is understood by all relevant stakeholders.

Evaluating the urban environment

While much recent design literature refers to the need for evaluative indicators to assess urban quality, few agree on how to do this. Most commentators are good at identifying problems and the potential improvements design can bring to quality of life, the environment, levels of crime, economic and social inclusion, and attitudes to the city, but they do not always set out the practical means of how to assess these.

Urban design is considered difficult to evaluate: perceptions and experience of urban space are complex and can be contradictory; it works on a long-term time scale; appropriate comparators may be hard to find; it is a collaborative, participatory act that needs to be sensitive to a diverse range of values and interests; its objectives are expressed in abstract forms (character, legibility, quality, ease of movement, adaptability, diversity); and it can become deeply embedded in the political process. There is also the difficulty that over the years, perceptions of a design will change. John Punter argues: 'Evaluations of design change over time. They change as the 'shock of the new' gives way to familiarity, as landscaping matures or materials weather, and as the whole climate of taste shifts.'⁶⁶

In addition, each city and each city space is unique so no off the peg urban design solution and subsequent evaluation methodology is available. Each city or project has to find its own methods of meaningful assessment which can carry public trust, confidence and support, and which can lead to change. This requires the development of both evaluation theory and evaluation management.

Some formal evaluation will already be taking place within the urban environment, including the pre-drawing concept and post-occupancy and post-implementation assessments of urban projects. In addition, there will be informal reactions to and judgments of urban space, and various stages of consultation and criticism that can be fed into the evaluation process.

Evaluating legibility

Kevin Lynch taught us to take into consideration the views of those who use cities, not just the work of planners. In *Site Planning*, he describes a number of analytical techniques used to assess the 'basic criteria of vital support, sense, fit, access, and control [that] are the enduring objectives of any site design'⁶⁷ and applicable to an assessment of legibility:

- Indirect observation – including past choices, precedents, archives, media content analysis, inhabitants' traces, professional literature.
- Direct observation – including behaviour settings, movement patterns, behaviour circuits, selected behaviour, experiments.
- Direct communication – including interviews, activity logs, naming problems, images, preferences, play memories, predictions, empathy, site visits, group interviews, participant observation, self observation.

Legibility is among nine performance characteristics for city form identified by Lynch which 'allow comparative evaluation of two particular city patterns' and 'can be defined and tested in terms of [their] spatial pattern of physical form and activity' and which correlate 'with more fundamental human goals'.⁶⁸

Legibility is one of the elements addressed in *Responsive Environments: a manual for designers*. The others are permeability, variety, robustness, visual appropriateness, richness and personalisation. Each affects the degree to which choice is available to urban users. With legibility the physical form complements the user's activity patterns. The shared legible urban image is made up of overlapping individual images, and the authors refer to Lynch's nodes, edges, paths, districts and landmarks as being the image's key physical or fixed features. The book provides guidance on how to make informed decisions during the planning process to design a democratic environment with maximum degree of choice for users. The eight stages are illustrated in Exhibit 3.

Exhibit 3 Planning process stages towards a legible environment

1. Become familiar with the kinds of physical forms that can aid legibility as a means of predicting the features of the legible shared image.
2. Test these forms by getting detailed information on legibility from a wide range of users by means of interviews, asking for directions or drawing maps from memory.
3. Combine the tentative layout scheme derived from stage two's findings with the fixed physical elements on site in order to put 'the overall skeleton of the project together in the most legible way'.⁶⁹
4. Decide which district the proposed scheme belongs to and the implications of this for its design.
5. Focus on 'a range of dimensions which are typical of the project's own district, and clearly distinct from those in adjoining areas; thus reinforcing the differences which distinguish one district from another'.⁷⁰
6. Reinforce each path in terms of its distinguishable character and functional importance using width and enclosure.
7. Identify junctions (nodes) to be reinforced as markers.
8. Provide additional markers to give the sense of moving forward (marker sequences).

Source: *Responsive Environments: a manual for designers*

In *By Design*, CABE identifies a number of objectives of good quality urban design and offers a checklist of prompts for understanding a space in relation to these objectives. The assessment methods it suggests include site visits, internal workshops, comments by panels, design awards, estate agents' views, residents' groups views. One of these objectives is legibility and the report suggests that assessors should look at gateways, landmarks, views, edges and barriers to judge the legibility of a site.

Evaluating the Bristol Legible City project

Bristol Cultural Development Partnership was commissioned to conduct the BLC evaluation programme in 2001. A number of workshops with project clients were held to agree objectives and methodology. It was accepted that evaluation should be long-term using both qualitative and quantitative approaches, and to look at peer comments and awards as well as interviews with users and beneficiaries.

Three key problems in evaluating the project were identified early:

- There are many users of BLC. The response of each of these to the system needs to be assessed as they have different objectives to meet or to be met. They include: visitors and tourists; businesses; venues and attractions; people admiring artwork *and* using it to find their way around the city.
- As a variety of stakeholders are involved in creating BLC, and as these are each measuring themselves against their own criteria, it is essential to obtain coherence in data collection.
- Some work had started before evaluation criteria and methodology could be agreed making it difficult to evaluate.

This makes the process of evaluation complex. Nevertheless, it was agreed to evaluate as fully as possible so that the system can be tested and changed, and to argue for additional resources to be found. Exhibit 4 provides a list of methods used:

Exhibit 4 Areas of evaluation for BLC

- Interviews – in person, by telephone and e-mail – with key members of the client group and beneficiaries and users, principally venues.
- Existing market research undertaken by each project/ group leader.
- Research by Cityspace regarding I+ usage.
- BLC conference evaluation.
- A questionnaire sent to members of BTCB.
- Biennial Bristol visitor survey, undertaken by South West Tourism on behalf of BTCB.
- Personal observation, by BCDP and others involved in the project.
- Newspaper coverage, peer comments and awards.
- Figures on project progress kept by City ID, Bristol City Council and others.
- Newly commissioned market research covering users of the system, map distributors.

The rest of this chapter provides results of the evaluation so far.

What is BLC trying to achieve?

BLC aims to provide unique products to improve people's understanding and experience of the city. These objectives will be delivered by projects encompassing city identity, improved information and transport as well as new arts projects, a clutter reduction programme, and the use of up-to-date technology.

Given that the approach taken, and what has resulted, has not been replicated elsewhere, few would deny that BLC is unique. BLC uses a unique font and unique colour for pedestrian signage and maps. The maps are also unique in that they are heads-up so that what you see on the map is from the perspective of the point where currently you are.

So far, BLC projects have included a new, integrated pedestrian signage system and maps, linking main points of arrival with key attractions, visitor destinations and landmarks. Since the project started, 100 new signs and 80 new maps have been installed. As a result, 110 pieces of redundant pedestrian signs have been removed. The plan to remove another 200 pieces of street furniture in 2002 was not fulfilled as officers concerned had to work on other projects. A degree of clutter reduction has been achieved therefore, though not as fast as was at first hoped.

Accolades received

BLC has won two awards: the regional planning award and the Royal Town Planning Institute Award for Innovation (February 2002). Jill Pain, chair of the judging panel, said: 'This is an outstanding example of planning innovation and achievement, which fully deserves wide recognition. The planning professionals involved should be proud that their work has resulted in significant environmental and public benefits.'

The collaborative and connected nature of BLC was also praised by the Planning Officers' Society. James Russell said: 'Identifying with our towns and cities, and making them more attractive and understandable to residents and visitors, is one of the keys to urban renaissance. The Bristol project is a credit to the joined up working of all involved, and should be a template for others to follow.'

This praise has been matched by local users. A member of The Bristol Civic Society (BCS) said: 'the signs, especially the maps, are one of the best things to happen in the city last year.' Charles Manton, writing in the BCS April 2002 *Newsletter*, said: 'Our congratulations to all concerned! Three cheers for Bristol being best.' In addition to the quality of the system, he praised the way the signs had escaped 'the scourge of advertising stickers which disfigure just about every other vertical surface in the city'.

Arts organisations have also been supportive. The Royal West of England Academy has not previously benefited from signage.

For them the sign system is 'excellent' and the maps 'helpful – though there should be more'. They commented: 'Anything that facilitates circulation within the city is to be welcomed...BLC provides a comprehensive and inclusive orientation system and provides an extremely visible impression of Bristol working together for the benefit of its citizens and visitors.'

Dick Penny, Director of Watershed Media Centre, calls the signs 'distinctive, clear and informative' and the maps 'very good – informative and fun'. He added:

Signing in the central area is now much clearer and gives pedestrians a good idea not just of where they are and where they want to go but also what else is available to them – it makes the city feel more accessible and attractive. The design sends out a strong message that this is a modern city with a sense of quality and style. Debate around the whole concept has helped raise aspiration in Bristol to make it a better city and projected Bristol to external audiences in a positive manner.

BLC has been of benefit also to Bristol's higher education institutes. Barry Taylor of the University of Bristol said that it has not only helped people find their way to the university, but also that it has 'added visual interest to the central area and boosted Bristol's image as a modern, hospitable city'. He added 'BLC has benefited the University in two ways. One is that there are fewer lost souls wandering the streets of Clifton looking for us. The second is that the University markets itself partly on its location at the heart of a creative, forward-looking city. BLC is evidence that this is the case.'

Over time, he believes, BLC may have a positive impact on residents' pride of place – not least because of the quality product. 'All the elements of BLC work well, both individually and as a suite' he believes. 'It is clear that they have been thought through with enormous care and imagination.' The University of Bristol has been so impressed with the system that they are planning to renew their signage to complement BLC.

BLC and the business community

Helping business operate more effectively is another key aim of BLC. Part of the foundation data for BLC was a survey of business opinion. There was support for the need for the system with over 70 per cent of those surveyed finding it difficult to navigate around the city and with nearly 40 per cent finding pedestrian signs poor. There was clear demand for on-street maps (76 per cent) and better designed road signs (64 per cent). There was support, too, for walking maps (36 per cent), on-street computer information (32 per cent) and greater use of art (28 per cent). There was also a call for greater promotion of the campaign with 48 per cent unaware of BLC and another 48 per cent with only a vague awareness.

John Savage, Chief Executive of the Bristol Chamber of Commerce and Initiative, says: 'All our research shows that signage was a major problem in attracting businesses to the city and helping them get the most out of it. The new pedestrian signage and maps not only overcomes that problem but – because it is unique – contributes to making Bristol a more attractive place.'

Follow-up research with the business sector in 2002 showed that, one year into the project, there had been some improvement, even if the responses were tentative. Now 18 per cent of businesses were fully aware of the system (as against eight per cent two years earlier), though 42 per cent were unaware. In terms of perceptions of usefulness, 14 per cent said BLC had definitely made it easier for pedestrian visitors to find their way, and another 75 per cent said that this was possibly the case.

A good example of where BLC is helping business is Broadmead Shopping Centre. Broadmead attracts 39 million visits each year, but needs to attract more to withstand the threat of out of town shopping and to make the case for expansion to investors in a current £500m redevelopment programme. Better signage, maps, and information generally, are essential. A major problem is that customers and visitors find it difficult to understand where Broadmead is, as well as know what it has, because of the confusing

nature of Bristol's city centre. BLC is a 'significant step forward because it creates the correct impression for our visitors', says John Hirst, Broadmead manager. As a result 'we give the right impression to newcomers, customers feel more comfortable and it tells them all that we mean business'. He adds: 'It sets a standard for us and a benchmark for other cities.' Thomas Cook, one of the shops at the entrance to Broadmead, like the signs and maps as they no longer have to deal with large numbers of enquiries about Broadmead, allowing staff to concentrate on their work.

The Bristol Visitor Survey

The first independent survey of the signage system since installation offers encouraging results for BLC. The biennial Bristol Visitor Survey, undertaken by South West Tourism on behalf of BTCB, which looks at road and pedestrian signs and maps and information boards among other points, found that 61.3 per cent of visitors thought that Bristol's pedestrian signs were either good or very good (8.2 per cent found them poor or very poor). Out of an optimum score of five, the average was 3.84 (in 1999 – the first survey – the average score was 3.44). The results were less encouraging for maps and information boards where 36.6 per cent found them good/ very good while 13.4 per cent found them poor or very poor. Out of an optimum score of five, the average was 3.48 (an increase from 1999 when it was 3.20). However, over one-third of respondents had no opinion.

Criticisms of the signage system and I+

There has been some criticism of the signs. At-Bristol commented:

Overall it has been a disbenefit so far for leisure and tourism. As an example, the delay in introducing good vehicular signage under BLC has meanwhile prevented At-Bristol from getting old-fashioned brown signs in the city or on the motorway (as the Highways Agency won't act until given the go-ahead from the city). We haven't got the new system (whatever it will be) in place and meanwhile the city council has not allowed us to have brown signs...Therefore, not only

has BLC not benefited us or other destinations, it has actually harmed us by preventing us from getting the level of signage that we would have got if BLC hadn't been established.

This problem is acknowledged and is being addressed, though it is accepted that there is a need to consider the better use of temporary traffic signs.

Other criticism has been levelled at what, so far, is a concentration on the city centre. Ruth Davey of Bristol East Side Traders, welcoming generally the system as making it easier to get round the centre, says:

Our small and medium sized enterprises in Bristol's inner city (Easton, Ashley and Lawrence Hill wards) have been crying out for years for better signage that will lead people from the city centre to neighbouring retail areas such as St Mark's Road, Stapleton Road, Stokes Croft...Traders in St Mark's Road, in particular, have been trying to get better signage as their clients come from all over the region and some find it difficult to find their way around.

Plans for the extension of the pedestrian signage to neighbourhoods should contribute to solving this problem, though it may be many years before the project is complete.

One group disliked what they felt was modernism in heritage areas. Gillian Davies of the Christmas Steps and St Michael's Hill Association said: 'They are totally inappropriate for a conservation area and provide a superb example of 21st century brutalism...They are not appropriate for historical settings such as Christmas Steps or King Street. They are also very "busy" signs which can be quite confusing when you have got several pointing in the same direction.'

Generally, the new signs and maps have been welcomed. The reception for I+, the high-tech information points, has not been as strong. While generally it is seen as positive, there are questions about usage and maintenance. Broadmead's view is that the system is not being used to its full potential currently. A representative of

the Clifton Suspension Bridge Visitor Centre found the system 'Far too complicated, takes too long, [and the] user is not aware that anything is "happening"'. The Royal West of England Academy said:

I think it is great to see such a system throughout the city as it shows a forward thinking attitude. However, I am sceptical as to whether the units are useful. I would be interested to see the statistics of what information is being accessed and how often. I also feel that the units are not maintained well enough. Although they seem to be working fine, they are not kept particularly clean, which I am sure puts people off using them.

Another comment made, from an organisation involved in tourism, was that I+ is 'not user-friendly, too slow to work [and is] more frustrating than helpful'.

I+ has been developed further since introduction. Cityspace, the company who designed the system, provides monthly statistics on usage trends to Bristol City Council, including use per kiosk and channel analysis, as well as feedback from users. In January 2003, for example, 26.24 per cent of users who responded to the on-screen survey found the service very useful and 38.3 per cent found it quite useful. Comments included:

I use this point all the time and I think it's great.

It's good while I am waiting for the bus and can catch up on my emails.

Thank you for helping me find a job. I find these information points very helpful.

Nearly 68 per cent of users who responded would like to be able to listen to music on the kiosks and a number suggested free text messaging as an additional service. Exhibit 5 provides overall usage trends from April 2001 to January 2003. (The increase in usage during the summer months suggests that the system is being used by tourists to the city).

Exhibit 5 Usage of the Bristol I+ kiosks since April 2001

Month	Kiosks in use	Total number of times system used
April 2001	17	27,184
May 2001	17	29,204
June 2001	16	24,866
July 2001	16	26,756
August 2001	16	27,436
September 2001	16	21,760
October 2001	16	23,196
November 2001	16	20,273
December 2001	15	17,570
January 2002	16	14,445
February 2002	15	15,141
March 2002	16	16,962
April 2002	16	16,215
May 2002	16	17,850
June 2002	17	16,502
July 2002	17	20,494
August 2002	17	22,048
September 2002	17	18,003
October 2002	16	18,420
November 2002	17	18,535
December 2002	17	16,039
January 2003	17	15,256

Source: Cityspace, 2003

The arts and BLC

In the first phase of BLC, three arts projects took place which have been evaluated: *walkie-talkie*, *Workplace*, and the joint South West Arts Marketing (SWAM) and Birmingham Arts Marketing visual arts cultural tourism initiative. FAT believe that they have helped establish 'the validity of the role a lead artist [can bring] to a project of this type' even if the complexity of the project meant that it took longer to gather momentum than other projects. They believe that they have helped foster relationships between the client team with council

departments and arts organisations (such as Spike Island), and others. FAT have also brought new thinking to the project, as well as stimulated different thinking about legibility by those involved. FAT accept that this is only a start. They say that 'whilst we cannot claim that such departments and organisations have become totally convinced of the need for such involvement, at least the residency has provided the opportunity for debate to begin'. Another result of this has been, they say, a heightened awareness of BLC as a project. Above all, they say, what has been achieved is that artists are not seen 'merely as a pleasant addendum to the project, but an indispensable and critical component of it'.

Bristol City Council's Arts Development Unit share the views of the success of the residency pointing particularly to the partnerships created, better dialogue, and increased understanding of the role that the arts can play in urban design and planning, and the role and approach to temporary arts projects by officers and members within the authority.

All three projects proved of value. The 600 metre long poem was enjoyed by residents and visitors, and the quality of marketing material in *Workplace* and the SWAM project was praised.

Interest from outside Bristol

BLC has produced a range of high quality publications, which are mostly distributed free of charge. These have been circulated widely. There has been considerable interest in the project from, among others, Cardiff, Swansea, Newcastle, Liverpool, Sheffield, Nottingham, Oxford and Reading. Other visitors to the city to look at BLC include Arts Council England, BAA and the Design Council. Articles about BLC have appeared in trade and academic journals – such as *Urban Environment Today*, *The Architects' Journal*, *Property People*, *Building Design*, *Graphics International*, *Urban Design Quarterly*, *Creative Review*, *Ordnance Survey Magazine*, *Design News*, *Landlines* (Landscape Design Trust), *Local Government News*, *Built Environment*, as well as local newspapers.

Most of this coverage has been positive. However, in a comment column in *Building Design* (23 March 2001), John Punter, reflecting on his presence at the first BLC Conference, raised a number of issues. He referred to discontent with the partnership with Adshel and the 'intensification of advertising that this would bring' together with resentment 'about the further intrusion of corporate logos and hard-sell images into the city's public space'. He also noted that legibility carried the danger of excluding some people from public space: 'Another concern was the progressive gentrification and sanitisation of public space, and the subtle and not-so-subtle social exclusions that take place as it is made safe and comfortable for middle-class inhabitation.' Though Punter's criticisms are not borne out by other conference evaluation, nor by the experience of other attendees, nor, indeed, by the project itself, the issues he raises are worth pursuing in debate.

Where possible comments from peers – other cities, urban designers, artists and arts administrators – are sought. In a report on the key requirements of urban renaissance, URBED director Nicholas Falk singled out Bristol's legible city policy to illustrate the importance of clear signage.⁷¹ The Central London Partnership's *A Walking Strategy for Central London* aims to improve the capital's pedestrian accessibility, connectedness and street scene so that people feel more inclined to walk and linger. Using two photographs of BLC signage, it describes the initiative as 'an excellent example of how to help people move around cities more easily, taking an integrated approach to issues such as wayfinding and local identity'.⁷² Southern Arts used the system as an inspiration to others. Peter Taylor, who led the Art at the Centre project, said in 2002:

I've been very impressed with the innovative signage system in Bristol and first experienced it as a pedestrian when I attended the conference in March 2001. On arrival at Bristol Temple Meads Station I decided to put the route map to the Watershed in my pocket and use the system. The route between the Station and the Watershed is complex and not one that I have taken before. The signs were at all the key points on the journey and I did not get lost at any time.

I found the system easy to use and the projected journey times on the maps removed any stress or concern about arriving late. An excellent system and one that I have no hesitation in recommending to cities and town centres in our region.

Queen Square survey

Since initial evaluation, a survey has been undertaken of the occupants of Queen Square, which had recently undergone major refurbishment and was the home of the legibility arts project *High Life*. There is a great deal of affection for the square among those working there, especially now that the building work is near completion, and some positive reactions to the BLC initiative. Exhibit 6 provides a summary of the key findings.

Exhibit 6 Key findings on BLC from the Queen Square survey

- 45% of respondents were aware of *High Life*. Only three respondents made negative comments about the project content but others thought there was insufficient publicity and information about its purpose.
- 50% of respondents thought it was easier for visitors to find their way around Bristol now elements of BLC were in place and 23% thought there was not much difference. Only one respondent thought it was not easier and the rest had no opinion.
- 56% of respondents thought the signposts were very useful and 21% thought them quite useful. Only one respondent thought them of little use and the rest had no opinion.
- 35% thought the on-street maps were very useful and 32% quite useful. Only one respondent thought them of little use and the rest had no opinion.
- 28% thought the printed maps very useful and 21% quite useful. Two people thought them of little use and the rest had no opinion.
- 19% thought the I+ points very useful and 21.5% quite useful. 12% thought them of little use and the rest had no opinion.

Source: Bristol Cultural Development Partnership, 2003

The map distributor survey

As the next stage of evaluation, questionnaires were sent to organisations that had been supplied with multiple copies of the printed map by BTCB for distribution to clients and visitors. The questionnaire aimed to establish how the maps had been distributed and whether they have been useful. Exhibit 7 provides a summary.

Exhibit 7 Key findings on BLC from the map distributor survey

- 93.3% of respondents had distributed maps.
- The most common reasons given for not distributing maps was lack of demand and the distributor's own address being outside the map boundary.
- 60% of those who had distributed maps provided some guidance in their use.
- 31.4% also gave out additional information about Bristol.
- 82% felt that people had found the map's clarity excellent or good and 79% thought the written information was considered very or quite useful.
- Just over 35 % thought no other map formats were required.
- The most popular additional format requested was a PDF.
- The most common suggestions for making the map more useful were having a wider coverage and providing more detailed indication of 'A' roads, bus routes, attractions and landmark buildings.
- A few criticised the colour scheme, either because it was hard to read, seemed gloomy or because it made faxing the map to visitors difficult.

Source: Bristol Cultural Development Partnership, 2003

The next stage of the evaluation will be to distribute questionnaires to map users. The questionnaire will also refer to other aspects of the system and its use by tourists, residents and workers.

The real test of the system is the impact on the individual user making their way around Bristol. During project development, imaginary journeys were constructed to identify needs and potential. Since implementation, real people have been testing the system. Exhibit 8 provides a summary of one case study.

Exhibit 8 BLC case study – Liz, December 2002

Liz has lived and worked in Bath for five years and is an occasional visitor to Bristol. As she feels she has exhausted the possibilities of Bath for her own visitors, she wanted to offer Bristol as an alternative. However, she first needed to increase her confidence about moving around the city and said that her present impression was one of confusion and intimidation. She was sent a *Welcome to Bristol* map in advance of an exploratory trip in the company of an observer.

There was no obvious BLC information at her arrival point of Temple Meads station and she had not picked up from the text on the back of the *Welcome to Bristol* map about the new signposts and on-street maps. She walked past the first BLC signpost at the bottom of the station approach and would not have appreciated the significance of the first on-street map she encountered at Temple Circus without guidance from the observer.

However, once she was aware of the system, she kept her eye out for further signposts and on-street maps. She thought the depictions of landmark buildings on the on-street maps was effective and liked the fact that a different perspective was given on the two sides. Knowing that information was available at points where she had to take a directional decision increased her confidence. She also felt able to explore side streets as she was certain that she would eventually encounter a signpost when she needed it or could refer to her map.

At the end of the day she had discovered sections of Bristol she had wanted to see but had not found before, could appreciate how

the areas with which she was already familiar were linked and had a much improved impression of the streets between Temple Meads and Broadmead. This meant that she would now be happy to bring visitors over from Bath. However, she had needed prompting on how the system worked and more information at her arrival point.

Source: Bristol Cultural Development Partnership, 2003

It is research like this that shows how such a project is working – or, more importantly – not working.

Management

Finally, in evaluation work we are as concerned with the management of the project as we are with the reception for the products. BLC is a public sector initiative with not-for-profit goals managed on a partnership basis. It is one of many partnerships in Bristol covering areas such as business development, housing the homeless, cultural development, sport and tourism. When partnerships work, they meet the needs of partners and create wider benefits for society. However, they are not easy to manage, involving sometimes fragile coalitions and alliances. Leaders need to be brokers and negotiators at the same time as inspiring vision, delivering mission, managing for today and planning for the long term.

As a partnership, the BLC management structure is loose. It has a client group, supported by formal and informal specialist working groups. Specialist consultants undertake much of the work, though overall financial and management responsibility remains with Bristol City Council. It is an informal partnership of many organisations and companies including Bristol City Council, Adshel, South West Regional Development Agency, BTCB, Harbourside Sponsors' Group, Broadmead Board and Public Art South West. It is therefore not just a joint venture between the local authority and a private sector company but seeks to integrate the work and wishes of amenity groups, other partnerships, artists and transport companies.

A key principle of partnership working is that the wider the network involved, the greater the opportunity for creativity. This approach has been critical to the progress of BLC. In the spirit of collaboration offered by BLC, much has been achieved: space for independent thinking; new people involved in projects; new solutions to old problems; greater confidence and trust in civic life and institutions; greater investment; long-term thinking. The partnership, despite all the challenges faced, has created a shared sense of purpose, greater civic pride and a better reputation nationally for the city. Managing a project like BLC is not simply about managing the development and installation of the system: it is about managing the network.

Building a partnership is a fundamental foundation for creating greater legibility in cities. This is not a talking shop, or a focus group: it is about sharing risks and successes (and sometimes failures). It is about bringing together funding, knowledge and other resources. BLC is a good example of how more can be achieved by working together than separately. Partnerships need vision, the right organisational structure and creative people who are all committed to quality in what they do and how they do it.

Key partnership principles include:

- Create vision and think big.
- Focus on opportunity, not threat – and on action.
- There must be an overwhelming need to work together.
- Be honest about motivations.
- Marketing is critical.
- Promote good relationships.
- Improve continuously operations and management.
- Be flexible.
- Empower staff to take action.

Partnerships are likely to prosper if each of the key partners has a healthy organisational culture with the strength, confidence and authority to be flexible. Only a long-term perspective can allow the necessary flirtation, courtship and marriage needed to create trust and confidence and build, enrol, sustain, develop and renew the stakeholder base. Managing partnerships demands changing to new ways of working, especially for the public sector. Some partners are not used to change, let alone working with others. Faster decisions are possible but consultation can be accelerated to such a degree that public and voluntary sector organisations are left behind, leading to a feeling of alienation.

It needs to be recognised that the private sector is an active partner in development: it is not involved simply to provide money, staff and legitimacy. Adshel, for example, is not in BLC for philanthropic reasons: they want a return as much as Bristol City Council and other stakeholders want the benefits. As well as getting a financial return Adshel see Bristol as a showcase for their work. Adshel believe that they offer BLC investment, risk-sharing, flexibility for delivery, an ability to build collaboration with other partners, access to the latest technology, and the contacts to communicate the messages of success. Bristol City Council point to gaining access to specialists at the forefront of good graphic and street furniture design as one of the benefits of the partnership with Adshel. It also has the opportunity to promote, free of charge, civic events and cultural activity in the city centre and elsewhere in the country through use of Adshel poster sites.

Joining up cities and local authorities is not easy, especially in bringing together and managing the stakeholders involved. For BLC, there was only limited support for the joined-up approach initially. This, combined with a lack of funding, put constraints on early development. BLC has had to create innovative formal and informal working arrangements: traffic engineers work with artists; designers with planners; advertising providers with council officers; tourism with retail. The position is complicated further as many of those involved directly have no formal contract with BLC, yet have to be motivated and made into a team.

Though BLC has been a success, progress has not always been straight forward. Organisational cultures that have developed over decades find it difficult to get out of a silo mentality. Similarly, the uncertainty posed by regular elections can make local authorities risk averse. The focus of funders shifting to other issues means that BLC has to fight to secure lasting support. The involvement of artists has provided a particular challenge. Their often imaginative solutions can frighten others: the artist is expected to bring creative genius to the table, but can be condemned for being impractical and too creative. Overcoming this was essential if the BLC project was to be more than a signage replacement system. Here continuing advocacy and persistence paid off.

There were also some difficulties initially within the city council in pursuing the extensive and costly procurement design process. The name itself was a problem (and remains so). Plans to establish a charitable trust for the arts programme foundered on a lack of funding. The project remains within the city council as a more formal partnership structure was seen to be inappropriate. Getting the message over that BLC is not just about signs has also proved difficult among many of those involved.

Some problems encountered can be put down to the natural life cycle of a project. BLC, important though it is, can only remain on crowded agendas for a limited time. Renewing the project – and renewing the support and partnership involved in the project – is critical.

One of the key lessons from BLC is the importance of leadership. BLC has benefited from the involvement of key members and officers. The inspiration they provide needs to be extended. We need to create new partnership entrepreneurs as the builders and leaders of tomorrow's cities. These will be leaders committed to social progress and serving the city. They will be highly educated and trained, marketing adept, able to take good ideas and deliver them. They must be able to build the relationships needed for success, consult well and effectively. We need to ensure as well that council members and officers, private sector developers, voluntary sector campaigners, are all trained better. They need to know more about the city they

work in, its history, the views of its citizens (and not just the usual suspects), and its regional, national and international responsibilities.

BLC has proved to be a success, but those responsible for its implementation cannot afford to be complacent. Evaluating the various elements that make up the system and the methods by which it is managed and delivered continue to be important in order to ensure that BLC is meeting and exceeding the needs of its users and to make the case for continued investment.

Conclusions – Towards 2008

Along with 11 other cities, Bristol bid to be 2008 European Capital of Culture. It was placed on the shortlist in October 2002. The bid aimed to be legible – it used the BLC font, was written clearly, encompassed the past, present and future of the city, and put forward a vision for Bristol that was not just about aspiring to provide good cultural facilities and events, but was also about making the city work effectively and efficiently for all those who live in Bristol, work in the city and visit. Above all, it was infused with the collaborative principle: many thousands of ideas were put forward from specialist groups, seminars, individual discussions, and by letter and e-mail.

At one point, the bid focused on the architecture of the everyday. For Bristol 2008, architecture is the most immediate, yet least explored, cultural experience of all. Whether it be the houses lived in, the transport used, schools, offices and buildings, the pavements walked on or the signs and maps that help people to make their way, architecture and urban design is encountered daily.

The result was a statement about the city, a cultural plan for Bristol to 2010, and – most important of all – a boost in confidence. Bristol 2008 also tried to look at the city, and city change, in a new way. 2008 is not just a party or a linked series of exhibitions, music events, and tourism initiatives: it is creating a city where everyone who wants to can contribute to its development and management. A key principle in the bid is the aim to engage everyone. On the cusp of 2008, everyone living in Bristol will be made a citizen of the city. This will do two things: allow them to have access to cultural activity in the year free of charge or at low rates, but also give them the responsibility to help build a better Bristol for the future.

2008 is also a good target for the completion of BLC. In addition to the improvements to infrastructure, 2008 will have helped people learn about Bristol's past, and given them the information, the experience and confidence to continue to help build the future of the city. It is a major extension of legibility to do this – but it is a natural and necessary one. And it is not just the responsibility of Bristol. All urban areas should be legible. Making the case for legibility is not easy. But for those concerned with the future of urban areas, it is essential.

- 1 CABE with DETR (2000) *By Design: urban design in the planning system: towards better practice* The Stationery Office: London p 8
- 2 DCMS (2002) *People and Places: social inclusion policy for the built and historic environment* London p 6
- 3 Grogan, P S and Proscio, T (2000) *Comeback Cities: a blueprint for urban neighborhood revival* Westview Press: Oxford p 265
- 4 Ibid p 243
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Those engaged in raising the debate on how to restore confidence in the city include the Urban Design Alliance, Urban Design Group, the Urban Economic and Development Group (URBED), Urban Splash and the signatories of the *Re:urbanism* manifesto (Campbell, K and Cowan, R (2002) *Re:urbanism* Urban Exchange: London).

Journals and publications that have provided useful background material include:

Arts Professional
International Journal of Arts Management
New Start
New Urban Futures
Planning
Regeneration & Renewal
The Architects' Journal
The Municipal Journal
Urban Design Update
Urban Environment Today

Websites of value include:

Arts and Letters Daily – <http://www.aldaily.com/>
 Arts Journal Daily – <http://www.artsjournal.com/>
 CABE – <http://www.cabe.org.uk/>
 Moving Ideas: an Electric Policy Network – <http://movingideas.org/>
 Public Art South West – <http://www.publicartonline.org.uk/>
 Resource for Urban Design Information – <http://www.rudi.net/>
 The Brookings Institution – <http://www.brook.edu/>

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Front cover images: left to right from top: BLC on-street map (Maria Moore), BLC street signage (Stephen Morris), BLC signpost at The Orange Imaginarium (Maria Moore), Bristol *High Life* project (John Martin Photography), BLC plaque (Stephen Morris), BLC street sign (Martin Chaney), BLC I+ point (Martin Chaney), Queen Square (Stephen Morris), BLC on-street map (Martin Chaney)

Inside front cover image: BLC 'Welcome to Bristol' sign (Stephen Morris)

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Legible cities. Accurately Placed landmarks³. General orientation of the maps was scored between one and three: One as having no orientation, two as intermediate and three as high orientation.Â Legible cities. 2. Visibility of Spatial Elements: Other physical characteristics regarding the urban layout are the location of spatial elements and their visibility through the urban layout. The cores of visibility are the zones that show high potential regarding visibility of important spatial elements. The Legible City is a pioneering interactive art installation where the visitor rides a stationary bicycle through a simulated representation of a city that is constituted by computer-generated, three-dimensional letters that form words and sentences along the sides of the streets. Using the ground plans of actual citiesâ€”Manhattan, Amsterdam and Karlsruheâ€”The Legible City completely replaces the existing architecture of these cities with text formations written and compiled by Dirk Groeneveld. Contents Bristol street scene circa 1950 Foreword 5 Building New Cities and a New Bristol Building Legible Cities 13 25 Building a Creative Partnership: Managing Legible Cities Conclusions: Building a Sense of Place Notes 51 69 79. Page 1: Building Legible Cities Andrew Kell.