

The Management and Maintenance of Historic Streets and Squares: Examples from Europe

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CABE Space Scholarship 2008

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Introduction

The Council for European Urbanism declared, at a symposium in Bruges in 2003, that European cities are under threat from, amongst other things, a loss of regional and national cohesion, character and distinctiveness. The Council agreed twelve challenges for the organisation, and perhaps for everyone involved in the design and management of the public realm, including:

- The degradation of public spaces;
- Public realm made from left-over space;
- Car-dominated transport;
- Indiscriminate road and street design; and
- Non-contextual guidelines and regulations in historic spaces.

This is especially evident in many historic towns and cities across England where streets and squares are losing their identity and distinctiveness as a result of over-engineering to cater for the motor car and the associated regulations that seek to segregate the various users of spaces with little regard to historic character.

The Manual for Historic Streets, published by the English Historic Towns Forum in April 2008, also highlighted the need for sensitive investment decisions in the historic public realm. It was apparent to many of the authors of the Manual that the lack of consideration of the historic importance of the streets and squares was having a significant impact on the quality and vitality of historic towns.

My study of European historic towns and cities sought to examine the management and maintenance of historic streets and squares. In particular, I wanted to look at the design philosophy behind public realm improvement schemes, with an emphasis on:

- The people involved in the design process;
- The decision making process including public involvement;
- Reasons for choice of materials;
- The functionality and maintenance issues of the schemes;
- Funding arrangements;
- Issues around local distinctiveness; and
- Ongoing maintenance issues.

Itinerary

In determining the itinerary for my Scholarship, I considered that the historic towns and cities of northern Europe were most likely to assimilate the conditions and climate found in the UK. I also wanted to examine a range of sizes of centre, and not just large cities that were, in themselves, international tourist destinations and often a focus for major investment. I was aware of the EU Liveable City project, which had commenced in 2002 and had aimed “to improve the public space (spatial domain) in historic city centres by looking at it in a co-ordinated and ‘joined-up’ way, and to balance the need to maintain and promote the heritage of the city with the demands of everyone who lives in, works in or visits the city – increased leisure facilities, round the clock facilities and services, and a safe, attractive and accessible city centre environment.”

The partner cities were:

- Norwich (lead partner);
- Emden (Germany);
- Gent (Belgium);
- Lincoln;
- Odense (Denmark); and
- Trondheim (Norway);

Examples from the UK



Leftover and inaccessible space between highways



Street clutter creating major barriers for pedestrians and environmental impact



Poorly designed and maintained street furniture



A mass of traffic lights, pedestrian guard rails and bollards detract from the internationally important city wall



A multi-message sign has a major impact on the street scene



The road safety, signing and design requirements for rising bollards creates a grotesque impact on the historic environment

Upon examination of the output reports of the project, I chose initially to examine Gent, Odense and Trondheim. With these destinations fixed, I also researched UNESCO World Heritage cities to assess whether there were any in northern Europe that might have undertaken recent public realm enhancement works. This revealed a number of cities that are listed as whole places rather than particular monuments and, in particular, the cities of Bamberg in Germany and Visby in Sweden.

I also took inspiration from the recently published book “New Public Spaces” by Sarah Gaventa (2006). The book is a showcase of a wide variety of public spaces across the world, including historic streets and squares and provided pertinent examples at Kalmar, Sweden and Zutphen in the Netherlands

A further very useful source of information about projects to regenerate public space was the Centre for Contemporary Culture of Barcelona’s (CCCB) European Archive of Urban Public Space “brings together examples of some of the most significant projects of the regeneration of public space that has occurred in different European cities over the last twenty years.”

The Archive content is based on the projects presented for the European Prize for Urban Public Space. Over 350 projects are listed on the CCCB website and it highlighted a number of projects that were relevant to the objectives of my study.

In addition, I was recommended by my mentor for the project, Mike Loveday of Norwich HEART, to contact the Swiss Pedestrians Association (Fussverkehr Schweiz) because of the range of projects that had been implemented in that country. I was fortunate, having made contact with them, to be able to join a visit organised by the German Pedestrians Association to a number of cities.

In order to manage the project, I decided to restrict my visits where possible to trips of no more than 5 days and to one country at a time. This was possible on most occasions, with the exception of my visit to Scandinavia. In all I spent some 35 days travelling.

Schedule:

The Netherlands

Delft #
Zutphen
Drachten
s’Hertogenbosch
Utrecht #

Germany

Bamberg
Nuremburg #

Scandinavia

Odense, Denmark
Trondheim, Norway
Visby, Gotland, Sweden
Kalmar, Sweden
Copenhagen, Denmark #

Switzerland

St Gallen
Winterburg #
Berne
Biel-Bienne
Zurich #

France

Bordeaux
Dijon
Besancon
Lyon

Belgium

St Niklaas
Gent
Mechelen
Namur
Antwerp #

Short visit

I chose to spend between 1 and 3 days in each city to provide an opportunity to interview local “professionals” where possible and to spend time visiting the spaces at different times of the day in order to understand how they function when both busy and quiet. Despite trying to make contacts with project designers or city councils, it did not prove possible to

interview anyone in France. However, I do not feel that this has impeded my study as I was able to make detailed observations of various projects in the four cities I visited.

In addition, I was fortunate to be invited to the Final Seminar of the EU funded Shared Space project that was taking place in Drachten in the Netherlands at the same time I was visiting the country.

The Projects

It is impossible to describe the detail of all the projects visited in just a few short pages. However, the following pages summarise the main findings from the cities that were the main focus of my study. These are:

- Zutphen
- S'hertogenbosch
- Bamberg
- Odense
- Trondheim
- Visby
- Kalmar
- St Gallen
- Berne
- Biel – Bienne
- Bordeaux
- Dijon
- Besancon
- Lyon
- St Niklaas
- Gent
- Mechelen
- Namur

Zutphen

This relatively small city of around 46,000 inhabitants is located in the province of Gelderland in the Netherlands. It is situated around 30 km north-east of Arnhem and is a Hanseatic city, one of a number along the River IJssel, and the evidence of the merchants' dwellings, businesses and medieval streets remain today. The historic centre is characterised by narrow streets leading into large spaces traditionally used for markets.

The city council has an ongoing commitment to investing in the streets to provide a high quality pedestrian environment while vehicles were allowed, either unrestricted or at certain times of the day. Some of the work is referred to in "New Public Spaces" but the investment continues, with Houdmarkt and Zaadmarkt being recent examples where a pedestrian friendly environment has been created. Projects have not been restricted to the street surfaces, but have included help with shopfronts and signs and building shutters. One particular problem tackled was the display of goods and A-boards outside shop premises. This has had the effect of creating spaces where it is easy to move around on foot or by bicycle and where vehicles are also allowed to enter, subject to certain restrictions. In the central market spaces the improvements have used smooth Belgian limestone which moves away from earlier schemes in the narrower streets, where fired red Dutch paving bricks and Belgian limestone pavements have been used. The limestone paving creates a smooth surface which is comfortable for walking and those with mobility problems. Particular attention to detail has been made to the needs of stall holders in the market area. Provision has been made in the surface for tying down stall awnings, which eliminates the need for heavy and unsightly weights.

Maintenance issues are common in managing the public realm and Zutphen demonstrated two contrasting issues. Firstly, the use of bespoke street furniture can cause problems when it becomes damaged. In particular, modern aluminium seats had been placed in the shopping streets and some would appear to have been damaged by a vehicle. Elsewhere in the city, the problem of weeds growing between small blocks was being tackled with a machine that burns them off as illustrated below.

In the more modern station area, Stationstraadt has recently been pedestrianised and the road crossing to the station forecourt is at pavement level with the cycle path surface continuing across the carriageway. Although the crossing is signal controlled, it does provide a sense of confusion for motorists and the reduced speeds did allow cyclists and pedestrians to cross without necessarily having to wait for the signals to go green. In addition, special brick paviours with raised white lines on them to provide both tactile and highly visible guides to the boundary between pedestrian and cycle routes.

More information on the project can be found in English at <http://www.okra.nl/>

Lessons: Zutphen has invested in a city wide approach to the improvement of the public realm. The use of local materials provides a sense of local distinctiveness and the city has recognised the importance of regulating shopfronts and street trading as well as investing in infrastructure.

Zutphen



Pedestrianised shopping streets



Belgian limestone paving has been used in more recent schemes



Burning off weeds between pavements



Bespoke seating has been damaged and not replaced



Cycleway footpath crossing outside station



Defining the join between cycleway and footpath

s'Hertogenbosch

The city is located in the south of the Netherlands around 80 km from Amsterdam and is the capital of the region of North Brabant. It was granted city status in the 12th century and has always been heavily fortified by ramparts. A number of canals also traverse the city. After the second world war, the central government declared the city a protected townscape and, as a consequence, many of the historic elements have been preserved.

Investment in improving the public realm has been a key piece of work in the city since the preparation of a public realm strategy in the 1990's. However, it was recognised that improvements could not be undertaken until appropriate measures to manage the flow of traffic through and around the city was in place. With this work completed, a comprehensive strategy was drawn up, involving Spanish architect, Beth Gali. Over the course of five years the streets of s'Hertogenbosch were reclaimed for pedestrians and cyclists in a €9 million project. The work is characterised by the bespoke street furniture including streetlights and cycle parking stands. The streetlights are very similar in design to those recently installed in Cork in Ireland where Gali has also worked.

The strategy that Gali started has continued and is culminating in the biggest project to date, the refurbishment of the central market place which was being implemented during my visit. Access to the centre is controlled by rising bollards, and it is apparent that these are much less obtrusive than those used in the UK, where a large number of signs often distract from the environment within which the bollards are located.

Lessons: The clear message coming from s'Hertogenbosch was the need to manage vehicular traffic in the historic streets before making them more pedestrian friendly. In addition, the importance of having a robust strategy is apparent and, although this was prepared in the 1990's it is still appropriate today. The use of bespoke street furniture also helps to create some sense of local distinctiveness.

S'Hertogenbosch



Pedestrianised shopping streets



Belgian limestone paving has been used in more recent schemes



Laying granite setts in the Market Place



Pedestrianised street, bespoke street lighting and spontaneous use of the space



Distinctive services cover



Muddying boundaries between different users. Street lights designed by Beth Gali

Bamberg

The city of Bamberg is a Bavarian town Germany located approximately 60 km north of Nuremberg. It dates back to around the 11th century and the old part is listed as a World Heritage City, primarily because of its authentic medieval appearance. The Old Town ranks as Germany's largest single architectural ensemble, extending over an area of 425 hectares and containing around 2,000 listed buildings.

Significant investment is taking place in the public realm of the Old Town, recognising by the city councils own admission that this investment helps to promote investment in the buildings that surround the streets and squares. A number of details within the projects are worthy of note. In particular, where streets were being made more pedestrian friendly, both rough and smooth finished setts of the same material was being used. The rough setts were used neared the buildings, with a path of smooth sets approximately 1 metre wide down the centre to facilitate easier use by those pushing buggys, in wheelchairs or those that found it uncomfortable to walk on rough surfaces. In addition, in the large square known as the Domplatz, there are no road markings whatsoever other than aluminium discs approximately 100mm in diameter to illustrate the edge of the carriageway. No "give-way" markings exist either, but motorists are able to navigate their way around without apparent danger.

Also of note was a large section of one-way street that bisected the old town and the relatively modern shopping area that was a signalled crossing. Rather than the crossing being the usual width, a length of around 120 metres was the subject of control, due in part to the number of desirable crossing points across the street. The road and footway surfaces were the same, and the carriageway extent was delineated by white granite blocks.

One particular problem area for the city was the Maximiliansplatz, a large square near the main shopping centre and close to the university buildings. The square adjoins the City Hall on one side and a major department store on the other. Beneath the square is an underground car park, paid for when the store was developed. Although formerly used as a location for the market, when improvement works had been carried out the market was temporarily relocated in to the adjoining shopping street. Trading increased so dramatically in the street that the traders do not want to return. According to the officer that I met, a number of designs and ideas had been put forward for its use but they could not make a decision as to what the space should be used for.

Lessons: Bamberg is an example where there is a recognition that investment in the public realm can result in private investment in the buildings that surround it. This investment has recognised the importance of the historic importance of the city and although vehicles are still permitted in the narrow streets, they do not dominate the area.

A key learning point is the use of both rough and smooth finished setts in the carriageway to help those with mobility impairments.

Bamberg



Extended pedestrian crossing with cycle lanes and one-way street all on one level



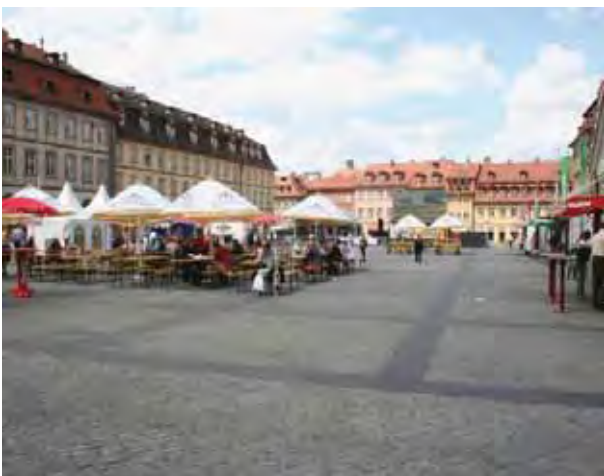
In the Domplatz, the line of the carriageway is defined by aluminium studs. There are no white lines



Lighting plays an important role. Note the ramp to help cycles to be pushed up and down the steps



The Sandstrasse, where smooth setts are used in the centre of the street with rough tumbled setts either side



The Maximiliansplatz, where the city council wants to do something, but it is not sure what



Displaying goods on the pavements is causing obstructions for pedestrians

Odense

The city of Odense in Denmark was one of the Liveable City partners and, with a population of over 150,000, is the third largest city in Denmark. It is also one of the oldest cities, having recently celebrated its 1000th anniversary. The city is the birth place of Hans Christian Andersen which draws a considerable number of visitors to view places of interest spread around the city centre.

As part of the Liveable City project, the city sought to improve the connectivity of the public realm to spread visits to the attractions and ensure that the streets and spaces were befitting to the many fine architectural buildings. A range of pedestrian priority streets were created to provide linkages between the various attractions. In addition, the city developed a range of distinctive street furnishings including manhole covers and bollards, using Hans Christian Andersen as a basis.

An especially impressive use of public art to provide function was at the northern end of Kongensgade, pedestrianised shopping street that ran perpendicular to the city centre distributor road. In order to reduce the impact of the traffic noise, a water feature had been put in place and the noise of the splashing water helped to baffle the noise of vehicles in the street behind it.

In the more historic centre, a project had been implemented to reduce the impact of vehicles travelling in the vicinity of the cathedral and city square. Although a low kerb exists between the highway and pedestrian area, the surface for both is exactly the same material and there is a sense of having created a space through which vehicles are allowed to pass, rather than having a highway that separates the cathedral from the city square and shopping streets. Light controlled pedestrian crossings remain, but these are relatively well integrated into the street scene and the small lights do not detract from the surroundings. Particularly impressive, was the street lighting outside the church that stood erect as sentinels to the main west door during the day and then turned to create a traditional form at night.

Lessons: The investment in the public realm in Odense has arisen due to the recognition of how managing tourism can bring benefits to a city. This has been achieved through significant investment and the creation of a better balance between motorists and pedestrians. The use of public art for functional purposes, such as bollards and manhole covers has also provided an element of local distinctiveness that is often overlooked through the purchase of “off-the-shelf” examples found in other cities.

Odense



These street lights located outside the cathedral swivel round at night to point the light to the ground.



Shallow kerbs and uniform material across the space helps to reduce the impact of the motor car



Litter bins and benches are part of the suite of street furniture with connections to Hans Christian Andersen



Bollards designed to the Hans Christian Andersen theme



Centre of the carriageway defined by studs and smooth slabs used to assist in pushing buggies and for cyclists

Trondheim

As the third largest city in Norway and a regional capital, Trondheim's historic core is based on a baroque city plan dating back to the 17th century. The streets in the city are particularly contrasting, the central shopping streets being wide and based on a grid pattern, whereas across the river the largely residential streets of the Bakklandet are much more intimate but marginalised from the centre.

A number of initiatives have taken place to link the modern and old parts of the city as well as within the individual neighbourhoods. In the Bakklandet, vehicle access is still allowed but narrow streets and rough finished setts help to reduce traffic speeds. Provision for cyclists is assisted through the use of large smooth slabs in the carriageway to create unmarked cycle lanes. This approach is also used in pedestrian areas to assist with pushing buggy's and wheelchairs. Cycling is encouraged throughout the city, despite the climate and a cycle hire system operates throughout the centre that enables registered users access to 125 cycles at various points in the city for a maximum of three hours use. The system is run by Adshel

In the centre of the city, the Torvet is the town's main square at the junction of four wide streets. At the centre is the statue of the city's founder, Olav Trygvason, which combines as a large sundial, the column casting its shadow on a cobblestone clock face below. Earlier in this decade a design competition was run by the City Council to "examine the square's potential as a meeting area without cars for the inhabitants of Trondheim, through aesthetic, artistic and functional development suggestions." In June 2004 the judging team voted in favour of two submissions but, following the publication of these proposals, there was considerable discussion amongst local people with many wanting to keep the area as it was. Following further work on the two proposals and a public workshop, the city council decided on the preferred option and the first phase of the project, comprising a new stage, new stalls and several street furniture measures like new benches, flowers etc. have been realized. These measures though, are temporary, until the planning for a permanent design for the Market Square is concluded. In addition, a new open air skating rink was opened in December 2005. Unfortunately, more permanent works have not been undertaken to date.

Another recent major initiative in the city has revolved around the former ship construction yards and docks area which has witnessed significant investment in the re-use of buildings and spaces. A new footbridge links the area to the city centre and the spaces around the dock buildings are used for open air cafes and a focus for events. Reference to the past is maintained by the retention of cranes and other installations.

Lessons: Trondheim has demonstrated that, even in climates where walking and cycling may not be the most attractive forms of transport, it is possible to make them viable alternatives to the motor car. The use of large slabs in otherwise cobbled streets is an innovative solution to allowing smooth passage while still retaining the aesthetic and traffic calming qualities of rough finished setts.

Trondheim



Extended pedestrian crossing with cycle lanes and one-way street all on one level



In the Domplatz, the line of the carriageway is defined by aluminium studs. There are no white lines



The new footbridge linking the former shipbuilding yards to the historic centre



The space in the docks has now become a focal point for street cafés and is a popular place to meet



The city cycle hire scheme has a number of points where bicycles can be picked up or left



The Torvet, in the city centre is pedestrianised and the focal point for a number of open air events

Visby

Located on the island of Gotland in the Baltic Sea, the walled city of Visby dates back to the 14th century and has a population of around 22,000 that grows considerably during the summer due to its popularity as a tourist destination. The walled town is a UNESCO World Heritage Site recognising that Visby was the main centre of the Hanseatic League in the Baltic from the 12th to the 14th century. Its 13th-century ramparts and more than 200 warehouses and wealthy merchants' dwellings from the same period make it the best-preserved fortified commercial city in northern Europe.

The narrow streets of the walled town are not able to cope with the modern day demands of the car let alone balancing these demands with those of pedestrians. A long term investment programme has been implemented to provide a more pedestrian friendly environment, without necessarily excluding the car. However, during the busy summer months the car is excluded from the centre, except for those with residents' permits and this provides a better balance to manage the large influx of visitors to the city and Gotland during the summer holidays. During all periods, the streets are effectively "Woonerfs" or pedestrian zones, as is evident by the traditional Woonerf sign throughout.

Public realm investment has been carried out both within the narrow streets of the walled city and along the promenade. A unique feature of the public realm work is the placement of concrete sheep as bollards throughout the city, reflecting the local economy's reliance on wool. In addition, along the refurbished promenade, new benches have been designed and manufactured locally from wood and concrete that provide a contemporary solution in a modern setting. Despite a near 2 metres drop to the beach, there is no railing along the edge of the promenade, only lights set into the ground at intervals. When questioned, my local contact from the city council stated that the promenade was wide and that if people were nervous about the edge then they should walk away from it!

In the narrow streets, small square setts had been laid in both a Florentine pattern and traditional courses. Changes in laying patterns on inclines and corners helps reduce wear and tear from vehicles and in drainage gullies the setts were also laid perpendicular to that of the carriageway.

Outside the city wall I witnessed a "shared space" approach to the link between the old city and a modern shopping centre. At this point a busy road that bypasses the old city has had all road markings removed and the same material is used across the footways and carriageway. The "confusion" created slowed vehicles down and made it much easier for pedestrians to cross the road.

Lessons: The walled city has had to find an approach to manage traffic that recognises the different demands on it at various times of the year. The approach to ban all but essential traffic in the summer months appears to work very well and create a safe and friendly pedestrian environment. The approach to maintaining a high standard throughout the walled city is also commended, rather than reducing the quality to make the money go further. The use of lights set in the ground along the promenade, rather than installing intrusive railings, reduces the potential clutter adjacent to the beach and open sea.

Visby



Pedestrianised streets during the summer months allow visitors time to relax and enjoy the historic environment



No motor vehicles allowed into the walled city during the summer



New benches on the promenade designed and manufactured locally



Narrow residential streets with the traditional rough cobbles help to slow vehicle speeds



"Shared Space" between the city walls and the modern shopping centre



Concrete sheep are functional and distinct to Visby

Kalmar

Located in Småland in the south-east of Sweden, Kalmar is a small city situated by the Baltic Sea. It has a population of around 35,000 and from the thirteenth to the seventeenth centuries, Kalmar was one of Sweden's most important cities. In the centre of the new city, the Kvarnholmen, that was planned and built in the 17th century is a square that has great historical and cultural importance for Kalmar. Stortorget, as it is known, was the location for religion, justice, education and administration. Today it is dominated by the Baroque cathedral which sits within the square.

Some 10 years ago the municipality joined forces with the Swedish Public Art Council and a local amenity society and invited proposals for the renewal of the Stortorget, the final project of seven in the Kvarnholmen aimed at strengthening the commercial, cultural and administrative functions of the area. The aim was to recreate it as a flexible public space where people could meet and enjoy themselves and enjoy various activities and events. The competition was won by British architectural practice, Caruso St John in collaboration with Swedish artist Eva Löfdahl. They had recognised the historical context of the square and the materials that had been used to make it's, albeit worn-out, surface. Their implemented scheme has extended the original cobblestone paved areas, removed the definition of the roads around the square, created smoother pedestrian paths and introduced art features that use water to provide a link back to the days when the Stortorget provided wells as a source of water for residents. Unfortunately, these features have since failed. Modern lighting columns also feature as part of the project, effectively single steel poles with a coloured light at the top.

The implemented scheme has restored the historic character of the square and reduced the impact of the motor car. The car has not been banned from the square, but it is restricted to paths around the edge, defined only through the extensive use of steel bollards. The rough finish helps to reduce traffic speed and create a feeling that the car is intruding into an historic space. During the day the square is a quiet place with just a few street cafes, albeit these were never part of the original plan. It is not a shopping centre and the market still not does function well on the square because of its separation from the main shopping streets. However, the restoration has renewed the historical connections between civic building and space, creating once more a place to meet and to hold civic events.

Prior to work commencing the Swedish government "listed" the square, therefore requiring a licence to undertake the renewal works. That licence was granted in March 2002 and the works commenced in April 2002, taking one year to complete. The project cost was 7 million Swedish Kroner (just under £600,000 at March 2009 rates).

Lessons: The most interesting aspect of this project was the listing of the square by the Swedish government. Suddenly the design and choice of materials was under scrutiny and the historic environment of the Stortorget became paramount. There were no ugly traffic signs or road markings and it was like going back to a city before the car had been invented.

The use of local materials was also significant, as few places can boast that the source of the stones is the fields surrounding the city!

Kalmar



Rough cobbles help to reduce traffic speeds



Stones for the surface were collected in nearby fields



A mix of smooth paths and rough spaces



One of the water features providing sound and light



The plaque to denote that the square is listed



The baroque cathedral forms the centrepiece to the square and is framed by modern light columns

St Gallen

The city is located in the eastern part of Switzerland and its origins can be traced back to the 7th century. In 747, a Benedictine abbey was founded and the whole abbey precinct was declared a UNESCO World Cultural Heritage site in 1983. Many of the houses and buildings date from the 16th and 18th century. However, the city's architecture is one of significant contrast, with recent contemporary additions to both buildings and public spaces. Spanish architect, Santiago Calatrava has designed three features across the city, including a modern entrance to an emergency call centre adjacent to the monastery walls, and a bus shelter.

The most striking and renowned feature of the public realm in the city is the "City's Lounge" located in a modern office development adjacent to the historic core. The project, financed by the adjacent insurance and banking businesses, has involved the laying of a red rubber "carpet" across the streets and spaces between the office buildings. The carpet even covers the seating and tables and appears to have covered a car parked in the street. Street signs are free-standing, almost as if they are standard lamps in a lounge. Vehicles are still allowed through the area to gain access to adjoining premises, but this ultimate "shared space" is definitely designed with pedestrians in mind. Even the street lights look like modern interior lanterns rather than traditional lamps on a pole.

While the project is somewhat eccentric, it does demonstrate that it is possible to create modern spaces without using stone or other hard materials. However, the use of the material for the surface does create its own problems. In order to clean it, a special vehicle had to be commissioned at some considerable cost, which has also been paid for by the project funders. In addition, where repairs have had to be made to underground services, the joins in the material have left an untidy appearance and there is also some evidence that these joins are coming unstuck. The day-to-day cleansing of the area is also paid for by the adjoining businesses.

In the older part of the city, there is evidence of recent investment in the public realm. Granite block paving has been used to define carriageways in pedestrian priority areas, with a mix of colours used to define certain focal points. Modern information points are also installed, similar to the type now being found in a number of cities around Europe including the City of London.

Lessons: The "city lounge" is a creative public realm solution to a modern development. Clearly maintenance is an issue and the ongoing funding arrangements needed to be secured when the work is commissioned. However, like any street and square, the carpet is a solution for a short period in a longer lifetime. The surface will not survive the elements as long as stone and at some point the city council and/or the businesses will have to invest in a new surface.

St Gallen



Everything is red, including the water feature



Cars and pedestrians share the carpet



A parked car has even had the carpet treatment



Traffic signs appear to be standing on the carpet



Parking spaces are defined by graphics and the street lights have huge modern shades

St Gallen



Entrance to Pfalz Keller (monastery district) designed by Santiago Calatrava



Bus shelter designed by Santiago Calatrava



Recent traditional paving scheme in the shopping centre



Abbey Precinct information point



Recently completed paving scheme in historic centre illustrating use of different colours



Berne

The historic city of Berne is the fifth largest in Switzerland with a population in excess of 120,000 in the urban area. The city centre is largely medieval and is listed as a UNESCO World Heritage Site. Due to the large number of important buildings in the “old city” the need for access has been a particularly difficult issue to manage. There are few totally pedestrianised streets and many carry buses, trams and motor cars. However, vehicles have not been allowed to dominate the most important historic streets and there is little evidence of road markings and traffic signs to detract from the historic environment.

One particularly recent scheme has been the refurbishment of the Bundesplatz, or Federal Square. In 1992 the city invited entries to refurbish the square, but it was not until 2003 that the project was finally implemented, opening in August 2004 after a one year construction. Minimal clutter on the square enables it to become a location for political rallies, concerts, sports events, the twice weekly street market and, due to the installation of fountains, a place where young and old meet and play. Many of these activities were witnessed during my short stay in the city.

More information on the project can be found at http://bundesplatz.bern.ch/federal_square

Lessons: The federal Square solution demonstrates the importance of using high quality materials and having a determination to succeed in the long term. It took 12 years to complete this project, but the materials and solution should last for many years before it needs further capital investment. The square also illustrates the multi-faceted uses of public squares, from meeting places, markets and places to see or be seen.

Berne



The Bundesplatz is a venue for:-
fun and games with the fountains.....



....traditional produce markets.....



.....and marching bands.



The square is surrounded by
government buildings providing its
historical context.



Even when the fountains are not on, the
square is still somewhere to sit and relax



Underground recycling bins elsewhere in
the city

Biel-Bienne

This Swiss city is located at the border between the German and French speaking parts of the country, hence the twin name. It has a population of around 50,000 and the historic part of the city contains a gothic church dating back to the 15th century. However, my short visit to the city was confined to the Zentralplatz where recent works had been carried out in accordance with the principles of shared space. The central area is the junction of seven roads and an important thoroughfare for cyclists and pedestrians as they move through the city. Some 12,000 cars, 1,000 buses and many cyclists and pedestrians traverse the square each day

The solution was to create a better balance in the distribution of space for users. The result has been classified as an “Encounter Zone” by the Swiss government, something similar to the “shared space” initiative in the Netherlands. The same gravel set in tarmac surface has been used across the square, whether for vehicular or pedestrian traffic. Minimal stone kerbs with no road markings create a sense of space that does not belong to any one particular user. A water feature is located in one area, while a street cafe is also a prominent feature in the space. Prior to the refurbishment, in 2002, some 80% of the square was occupied by roads. Now the edges are blurred and, as a consequence, the space has once more become a place for people to meet and not just pass through on their way to other parts of the city.

Lessons: The solution has certainly created a better and more pedestrian friendly space. However, the traffic speeds still remain relatively high and as a consequence it is difficult to cross the roads at times. The principles of “shared space” do not appear to be adhered to as drivers still treat pedestrians in the road with disdain.

The traffic signs, although minimal, are quite ugly and utilitarian, detracting from the overall quality of the scheme. It may have been better to have specially designed features if it was deemed necessary to retain the traffic signs.

Biel - Bienne



Shared Space approach to Zentralplatz, with the carriageway line defined by a different material



The traffic signs look out of place and detract from the quality of the overall scheme.



Traffic still tends to dominate the square



Later work, like placing this sign in the square, has not integrated well.



A water feature adds interest



Zentralplatz is a more relaxed place to meet, rather than a thoroughfare to elsewhere

Bordeaux

With a population of over 1,000,000 Bordeaux was one of the largest cities visited in this study. Bordeaux is home to one of Europe's biggest 18th century architectural urban areas and one of the first French cities to have entered a period of urbanism and masterplanning. The historic part of the city is described on the UNESCO World Heritage List as "an outstanding urban and architectural ensemble" of the 18th century." The construction of a new tram network across the city has brought with it a number of improvements to the public realm. The main inspiration for my visit was the Place Pey Berland, a central square dominated by the cathedral and the separate 15th century Pey Berland Tower. The area was originally dominated by cars circling the cathedral, but the arrival of the tram in the square removed cars from two sides to make way for the tram and facilitated creating more space for pedestrians. The scheme, designed by King Kong Architects from Bordeaux, creates a pedestrian space on two sides of the cathedral while on one side the space is dissected by the tram and a road still runs along the other side, albeit shared with another tramline.

The surface consists of very large slabs interspersed with rectangular opaque glass lights as well as brass plaques telling the story of the square and people associated with its history. Main lighting is provided by contemporary flood lights in the corners of the square. They provide, in themselves, distinctive architectural statements even when they are not lit. A row of bollards is the only distinction between the pedestrian area and the tram line and vehicles also have limited access to the square, primarily to access underground parking. A tram-stop is located adjacent to the Tower, comprising a raised platform and an opaque glass screen. Stone benches in the same material and colour as the surface, are provided around the square with lighting underneath to highlight their existence at night. Cafes are populating the space and overall the noise of traffic circling the square has been replaced by a relaxing environment that is appropriate for such distinctive and important buildings.

Elsewhere in the city, the arrival of the tram has been the catalyst of further significant investment in the public realm. In addition, a strategy adopted in 1996 sets out a charter for the creation of better places for pedestrians across the city supported by the Mayor of Bordeaux. One unique project is the construction of the "Miroir d'eau" opposite the Place de la Bourse, which is the largest mirror of water in the world. Pumps below the surface allow the creation of a 2 cm stagnant pool of water enjoyed by young and old followed by a fog that creates an eerie mist that people disappear into. When still, it creates a perfect mirror of the symmetrical buildings of the Place de la Bourse and the fountain of the Three Graces. Vehicles and trams pass through the square and wide pedestrian crossings are positioned at each end to enable the large numbers of people to cross between the promenade of the Garonne river and the old city.

In the Place de la Comedie, the arrival of the tram was also the catalyst for the makeover of this square, located in front of the Grand Theatre and Grand Hotel. The removal of through traffic has provided a space that, like other interventions in the city, has provided a much better setting for the historic buildings.

For more information on the projects visit the "Voirie et places" pages of the Bordeaux council website at www.bordeaux.fr Information on the Place Pey Berland project can be found at www.kingkong.fr

Lessons: Bordeaux provides an example of major investment in both public transport systems and then public realm that few cities can match. However, the principles of the projects provide a pallet of ideas to be translated into scheme in other cities, such as the use of public art and ensuring major infrastructure projects also provide additional benefits.

Bordeaux



Place Pey Berland at night



Ground lighting in the Place Pey Berland



Floodlights in the Place Pey Berland



Tram lines and pedestrian square

Bordeaux



The city tram doesn't require overhead lines thereby reducing the associated clutter. It also demonstrates that trams don't have to go along over roads



Distinctive railing designed specifically for the location



Inner city bus service



Place de la Comedie and Grand Theatre at night



The "Miroir d'eau" provides opportunities for fun whether it is flooded.....



.....or creating a mist.

Bordeaux



Note the raised metal divider between the tram line and pedestrian area



Subtle markings to distinguish a cycle lane



In this part of the city, lights are used to define the kerb line



This pair of Tortoises are very popular with children and prove the value of public art.



The "Miroir d'eau" opposite the Place de la Bourse.



A narrow city street with the carriageway defined by bollards rather than paint

Dijon

The city is the historical capital of Burgundy and has a population of around 150,000. The centre of the city retains many historic buildings dating back to Baroque and Renaissance periods and many 18th century homes still remain occupied in the city centre. My main purpose of studying Dijon was to view the Place de la Liberation, a semi-circular space in the heart of the historic centre that was built between 1682 and 170. The space has been transformed from a car dominated area to one that provides a more appropriate setting for the Baroque Palais des Ducs de Bourgogne on the northern edge. The space that exists today is the result of a number of improvement schemes that have taken place over the years, but this is by far the most radical in that it has removed all vehicles with the exception of buses passing through the square and other vehicles with access permits. The “square” today consists of a route with stops in front of the palace while the remainder of the space is reserved for pedestrians and street cafés and three sets of water fountains which also contain lights to provide interest at night.

A noteworthy feature of the square is the apparent increase in water flow/height in the fountains when buses are approaching. This has the effect of drowning out the intrusive sound of the motors. Rising bollards are positioned at each end of the pedestrian area to enable vehicles to access properties and streets to the south of the area. Studs within the paving denote the vehicle route, which is also used by the city electric powered mini-bus which runs through the historic core where larger vehicles would be unable to access.

Elsewhere in the city, there was a fine example of managing traffic in narrow historic streets. The road, a one-way street, had been brought up to the pavement level with no delineation between carriageway and footway other than different surfacing. This approach appeared to work well for slowing traffic down and allowing pedestrians less obstruction to crossing the road. The point at which the carriageway was brought up to the footway level comprises a sharp edge of paving of around 30-40mm that required drivers to slow down or face the consequences. This was an interesting alternative to the traditional ramp, although I did not witness how cyclists handled it.

Lessons: The refurbishment of the Place de la Liberation has created one of the most attractive squares that I visited during my study. It has not totally excluded vehicular traffic, thereby retaining movement and life, but has created a destination for cafes and a place to catch the bus that is safe and attractive. The only drawback for bus users was the lack of shelters, although their provision at the bus stop would have had a significant detrimental impact on the setting of the adjacent palace.

The use of a small electric bus within the city also provided an example of maintaining public transport access to historic streets without the use of intrusive and noisy vehicles.

Dijon



Seating with lighting underneath



The fountains in the Place de la Liberation are not only functional, but also provide a point of interest



Looking across the road to the square. Note the same coloured surface materials throughout



Street cafes are now becoming established in the square



At night, the fountains light up to provide a further focal point



The benches are popular for people waiting for buses

Dijon



The electric powered city bus has access across the pedestrian area of Place de la Liberation



Bringing the road up to the pavement level with a bump!



Skateboarding was also causing damage to street furniture in Dijon



A waymarker for the city heritage trail.



Panoramic views of the Place de la Liberation





Besancon

The city is located in the eastern sides of France close to the Swiss border. With a population of around 220,000 it is the capital of the Franche-Comte region. Much of the built form in the centre dates from the 17th century walled city built in Vauban's classic "star" shaped design. The city was added to the UNESCO World Heritage sites list in 2008 in recognition of the links to the works of Vauban. Much work has been undertaken in recent years to improve the public realm, including the major reconstruction of the Place de la Revolution, which was completed in 2005 and has involved the removal of parked cars and the recreation of a grand square. The finished scheme uses primarily small square blocks set in a pattern of traditional courses with granite kerbs delineating between the pedestrian area and a tarmac roadway through one end along which services vehicles and buses pass. The main feature of the square is the fountain which has been retained. Around the square are important public buildings as well as cafes that have expanded into the open space.

There has also been significant investment in the streets of the city centre, including the pedestrianisation of the Grand Rue and the Place Louis Pasteur. In the latter, recent works were nearing completion during the time of my visit and included the removal of a 1960's water feature, repaving, the placing of new bespoke seating and the planting of a semi-mature tree. In order to allow the tree to establish, it was protected by screens that also provided information about the whole project.

Another useful idea from the city was the positioning of chewing gum collection sheets next to litter bins. People that have finished with gum are able to stick it on paper sheets rather than leave it on the pavements. This initiative appeared to work as there was little evidence of gum on surfaces. A cycle hire scheme, called Velocite, was also operational in the city that appeared to operate along the same lines as that in Trondheim.

Lessons: The removal of parked cars from the Place de la Revolution and the creation of a large space for pedestrians has been a brave move. The square is not as busy as the shopping streets and other spaces around the city, but it does enable the historic qualities of the buildings that surround the square to be appreciated.

The provision of information about the ongoing public realm improvements in Place Louis Pasteur is useful for both resident and visitor alike.

Besancon



The refurbishment of the Place de la Revolution provides an environment to better appreciate its historic character



Bespoke planters and new street cafes



Vehicles are still allowed through parts of the square, but road marking do not exist to "help" the driver



The fountain remains the focal point of the Place de la Revolution



Paper sheets above litter bins enable chewing gum to be disposed of without making a mess on pavements



Tree guards and grills have been especially designed and manufactured for Besancon

Lyon

France's second largest city and capital of the Rhone-Alps region, Lyon is a UNSECO World heritage site and has many architectural and historic landmarks. The city has a large number of public squares and grand boulevards, as well as a rich mix of narrow streets in the more medieval area of Saint-Jean and the Croix-Rousse. The City Council's website notes that:

"Since 1989, more than 150 public spaces in Lyon and the metropolitan area have been remodeled by famous French urban designers and landscape artists. Each has his own style but created a unified and coherent space thanks to a common set of guidelines used by all. Measures taken in favor of enhancing public spaces are an integral part of an overall policy concerning town planning which includes, among others, the new Lighting Plan, a Green Plan (protection of nature areas), a Blue Plan (development of the river banks and their environment) and a Color Plan (palette of colors imposed on buildings along the quays and large complexes). Lyon's program of renovating and developing public spaces has won the city recognition as a European innovator in the field of urban design."

One particular street of note is the Rue de la Republique, the main shopping street in the old city. The refurbishment of this important street was designed by Alain Sarfati which has resulted in a pedestrianised street with minimal obstruction and a focal point of a water feature in the Place de la Republique. The €9million project has been completed for a number of years and is not showing any particular signs of deterioration. Vehicular access is allowed across the street, but this is not a dominant feature and very much requires vehicles to give way to the high flow of pedestrians.

Elsewhere in the centre, the Place des Terreaux has also been the subject of significant investment resulting from a design by Christian Drevet and Daniel Buren. It is the second largest square in the city and surrounded by some of the city's most important buildings. A design that makes reference to the nearby presence of the Saone and Rhone rivers makes a strong use of water. A grid of small fountains set into the ground that across the square allows the transformation from fountains to reflecting pools to, when not in use, a dry square that can be used for other public functions.

However, my visit highlighted some maintenance issues with the installations and it is apparent that some significant investment will be required soon to bring the square back to the quality of the original installation.

For more information on public realm projects in Lyon see:

www.lyon.fr/vdl/sections/en/urbanisme/espaces_publics and www.sarea.fr/

Lessons: The main lesson learnt from Lyon is the need for continued maintenance for projects. There were signs that projects that had a major capital investment were showing signs of wear and tear due to the lack of ongoing maintenance.

Lyon



Streets in the old quarter and pedestrian friendly and retain many original features



The Place des Terreaux is a popular meeting point in the city



Maintenance in the Place des Terreaux is becoming an issue



Rue de la République is pedestrian dominated but does not restrict traffic from crossing it



Place des Terreaux - note the aluminium railings between the carriageway and pedestrian area.



Patterning across the Place des Terreaux becomes functional as it is continued on the highway

Gent

Also spelt Ghent, this city is the capital of the East Flanders province of Belgium. In the middle ages it was one of the largest and richest cities of northern Europe and much of its medieval architecture remains intact. Today the population is in excess of 200,000 and is also home to 26,000 students at the local university. The city council was a prominent participant in the Liveable Cities project.

The City Council has embarked on an ambitious programme of regenerating the main public spaces and other streets in the historic core. The historic streets and squares had become cluttered by parked and moving cars and all the associated street furniture required to manage traffic. It was decided to reclaim the spaces for the city as part of a major investment programme that sought to make it a destination for visitors that would normally bypass it for Bruges or nearby Antwerp. The regeneration of the public realm has had to take account of the need to maintain access for trams and, where necessary, motor vehicles. But at the same time, the spaces in the centre have been transformed into places to meet and to stage events. There is a year round programme of activities in the spaces including concerts, markets and performances.

In addition to works around the traditional historic streets, work also took place along some of the riverbanks that pass through the city. New pedestrian paths have been created as well as modern footbridges to encourage movement by foot and cycle.

Lessons: The regeneration of the streets and spaces in Gent has demonstrated that in order to attract visitors it is necessary to have a good quality public realm that provides a welcoming place that can be adapted for a number of functions, such as the many festivals that now take place in the city centre.

Gent



New surfacing and street furniture



Subtle distinction between footway and carriageway



New seating



No railings between footway and canal



A somewhat large sign at the entrance to the pedestrian priority area



New paving and street furniture

St. Niklaas

Also situated in East Flanders, St Niklaas has the largest market square in Belgium which is overlooked by the 19th century city hall constructed of typical Flemish proportions. The Grote Markt had long been the subject of proposals to rid it of the car and replace it with a space that the city could be proud of. Eventually Cepezed Architects based in Delft were employed by the mayor to design the refurbishment of the area. The solution, championed by the City's Mayor, was the removal of cars by placing a car park underground and devising a simple flow of vehicles around the market place, leaving the central area free of obstacles. A boardwalk was provided around the square, creating a "promenade" for users while the central area was kept totally clear of obstacles, enabling the square to be used for events such as an annual hot air balloon festival. Public art adds to the perimeter, with both traditional statues and more modern interpretations. A number of bus shelters are located around the perimeter and entrances to the square are marked by "shelters" that mark where thoroughfares leading from the square are.

In the centre, the square has been designed so that it is not totally flat, but has a slight hump in the middle to provide a better perspective across its huge expanse. The square performs a number of functions, being the location for markets and other civic events including a hot air balloon festival.

The project was completed in 2005 and the cost of the whole project was €66 million.

Lessons: The Grote Markt is not only a huge space, but it is also a focal point for a large number of trips in St Niklaas. The project has taken a huge commitment from the city council to invest significant sums into the space and the result is a managed space with movements kept to the outside that does not inhibit access to the middle by cyclists and pedestrians. The use of wood to create a boardwalk provides a softer approach and one that is clearly popular with residents.

St Niklaas



The wooden decking perimeter, looking towards the city hall
Cepezed Architects



Public art plays a unique role



Underground car parking and bus lane



Decking and small brick paviours



The size of the square can be appreciated from this photograph
Cepezed Architects



Lift to underground parking and entrance to the Grote Markt
Cepezed Architects

Mechelen

The city of Mechelen lies midway between Brussels and Antwerp and, although much of the built fabric dates to the 16th century when Margaret of Austria was designated regent of the Netherlands, the origins date back much further in history. Saint Rumbold's Cathedral and the distinctive facades of the surrounding buildings dominate the historic core, built around a series of open spaces.

Towards the end of the 20th Century there was significant out-migration from the centre and businesses went into decline. Vehicles took over the public spaces and the Grote Markt turned into a large open-air car park while the nearby Veemarkt became subsumed by the terminus for urban and regional bus networks.

Commencing in the 1990s, the city began to invest in the urban fabric, with the most significant decision being to pedestrianise the major road crossing the centre and linking the Grote Markt to the railway station. In addition, underground car parks were built beneath the Grote Markt and Veemarkt, reducing the pressure on the city centre and, once construction work had begun, the City Council invited entries to renovate the surface of both squares.

The Grote Markt scheme has essentially repaved the whole of the square in one palette of small setts and a minimum use of street furniture. Stairway entrances to the underground parking are marked by glass screens as are the lift chambers. Where kerbs exist, they are faced with either aluminium or stainless steel to provide a distinction between footway and roadway.

The Veemarkt has been transformed into an orderly bus terminus through a contemporary design and the use of modern materials. Benches are made of glass which not only provide lighting in the evening, but also provide natural light to the underground parking during the day. The pedestrian surface is a distinctly red material but the roadways continue to use the distinct small granite setts found across the city centre.

In another quarter of the city centre, the former Lamot brewery has been regenerated to create a congress and heritage centre and is popular with students. It is located next to the Dijle river and the embankment has received a contemporary treatment that is a popular location for street cafes. A new bridge crosses the river to provide a link to the historic centre. Elsewhere, in the vicinity of the Vrouwekerk, the streets and pavements merge into one, with only changes in the direction of paving delineating between the carriageway and footpaths.

Lessons: The significant investment in the regeneration of Grote Markt and Veemarkt has created spaces that, while using contemporary solutions to street furniture, respect the significantly important historic setting. Once again, as with so many examples visited, the solution has used minimal approaches to the supply of street furniture..

Mechelen



The refurbishment of the market place has allowed the many historic buildings to have an appropriate setting



Kerb faces are clad with metal to improve visibility



Underground car park entrance



The new bus station in Veemarkt



In the vicinity of the Vrouwekerk, the streets and pavements merge into one



Unique pedestrian waymarking

Namur

The capital of the Walloon region of Belgium, Namur has a population of just over 100,000 that is swelled considerably by a large student population. The city has a chequered history, due to its location near the French and German borders.

The city council employed a local architectural practice to design improvements to the streets and squares, which were becoming dominated by vehicular traffic to the detriment of the environment. Atelier 4D devised a strategy for the improvement of the main spine through the city centre, from the station south to the castle, with improvements to the main spaces on the way. The main implemented project has involved the transformation of Place d'Armes, where the traditional stone surface has been replaced by raised wooden decking across the whole square with matching seating. The result is a very quiet atmosphere where sounds are absorbed by the wood and where people actually sit on the floor, something never experienced on stone surfaces. The surface does become slippery when wet but, as the architects I interviewed stated, you expect wood to be slippery when it's wet and are duly cautious. He suggested that such a risk was not sufficient enough reason not to use wood as a surfacing material. Public art in the corner of the square reflects the connections to the local snail trade, acknowledging too the proximity of the French border.

Elsewhere in the city, the architect's plans have not come to fruition, somewhat to their frustration. They feel that the city council has lost its nerve and bowed to the pressure of the car driver seeking to find parking places as close to the centre as possible. This is very much in evidence and some of the streets are heavily trafficked, making it difficult to cross the road. There appeared to be no appetite to complete the project and this had left the practice very frustrated.

For further information visit www.atelier4d.be

Lessons: The successful use of wood as a surfacing material was the main outcome of the visit to Namur. It is a much softer material than stone and has added benefits of absorbing sound. Although acknowledged as being slippery when wet, it is probably no worse than polished paving.

In addition, it was clear that there were tensions between the architectural practice that had drawn up the strategy for the historic streets and the city council that had changed its mind about investing further in the streets. Unfortunately, the real benefits of creating a pedestrian friendly historic core had not therefore been realised.

Namur



The wooden surface encourages people to sit on it



The square in 1990, dominated by cars
Atelier 4D



Public art, reflecting the importance locally of snails



The wooden decking design is continued on the benches



A water feature is located in one corner of the square



Aerial view of the completed project
Atelier 4D

Conclusions

The wide range of projects and cities visited provided examples of such a diverse range of projects in the historic public realm that it is impossible to report the projects and draw conclusions in a few paragraphs. However, it is clear from all the projects that there is a much more conscious effort to maintain high quality streets and squares in European cities. Major investment is taking place for a number of reasons, primarily to manage the motor car, as well as preserving the historic environment.

Public art and local distinctiveness play important roles in any designs, from the red carpet of St Gallen to the functional design of street furniture in Odense with the Hans Christian Andersen theme. Different types of surfacing material are also apparent, sometimes reflecting local sources, but primarily imported in from other countries.

Responsibility for the design of schemes has rested on a number shoulders, but it is clear that architectural practices play a significant role in the design and implementation of projects, whether employed by local authorities or as part of a tender process.

At the end of the study, the statement that made most impact on me came from Michiel Cohen of Cepezed Architects, the designer of the St Niklaas Grote Markt project. He said that:

“The design should not be teleological, as I formulate this, i.e. it should only be a functional intermediate phase in a continuous process. Never a final solution, since these do never have a long lifetime, but a single step in an evolution. So it attains a functional durability.

The design has to be made at eye-level. Most town planning is done from bird’s eye view. What I like most coming to Sint Niklaas is the fact that nobody seems to hesitate even in this enormous space. It seems to be intelligible immediately to all.”

The lessons I have gained from the range of different examples that I have visited as part of this Scholarship have already had a significant impact on the way I view and contribute to proposals for improvements to the public realm in my own council. I am also able to add the lessons to my knowledge from the Manual for Historic Streets in the many presentations that I am asked to make on the subject to various audiences both in the UK and abroad.

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Other cities visited



Extension of Living Room into street, Delft



Tandems aren't always necessary to carry two people, Delft



No road markings, but buses are allowed through the historic core of Nuremberg



Recent environmental improvements outside St Michel Cathedral, Brussels



Public realm also extends to riverside sitting area in Zurich



Smooth slabs for cycles and buggies are also common practice in Copenhagen

