

LAYERS OF LIVERPOOL

MAPPING A SENSE OF PLACE

Written by Laura Davis and Fiona Shaw

Edited by Inge Panneels and Jeffrey Sarmiento

WORDSCAPES 

Layers of Liverpool: Mapping a sense of place

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Copy editor: Caroline Russell

Printed and bound by Lulu.com

ISBN: 978-0-9566344-5-0

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First published in April 2013 by Wordscapes

Metal @ Edge Hill Station

Tunnel Road, Liverpool L7 6ND

www.wordscape.org.uk

A NOTE FROM THE ARTISTS

The Liverpool Map is a technically ambitious sculpture that embraces 800 years of history that have shaped this city. Seventeen layers of fused glass encapsulate its heritage and identity into a snapshot of the city of Liverpool in 2008, its year as European Capital of Culture.

The Liverpool Map project was a true team effort. It could not have taken shape without the the contributions of content and opinion of the people of Liverpool, the generous support and knowledge of the National Museums Liverpool staff, Phil and Alexis Redmond, the unwavering guidance from Open Culture through this long project, the dedicated labour of a small army of staff and students at the National Glass at the University of Sunderland who made Liverpool Map a reality, and finally the commitment from publisher Wordscapes and designer Małgorzata Rudnik to bringing the Liverpool Map to a new audience in print.

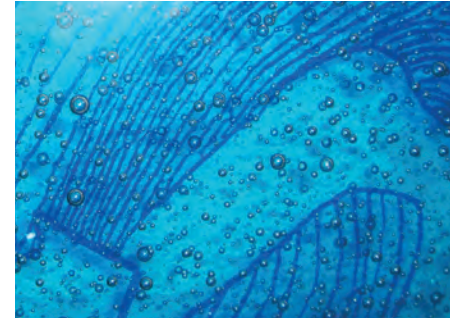
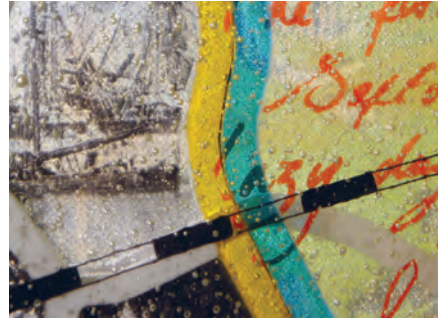
Needless to say, our families have provided huge amounts of support and encouragement throughout the making of both the sculpture and the book. We couldn't have done either without them...

Inge Panneels and Jeffrey Sarmiento

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PART ONE -



BACKGROUND AND CONTEXT



The *Liverpool Map* didn't just happen of its own accord; it is not a piece of art for art's sake. Its creation marks a specific time and place in Liverpool's recent history. It is part of the legacy of 2007 – the city's 800th birthday year – and of its triumphant reign as European Capital of Culture in 2008. But it also symbolises a renaissance – a city that has plumbed the depths since its 1930s heyday; bombed more heavily than any other English city outside London during WWII; inner - city housing clearance; the mechanisation of its famous docks with containerisation in the 1970s; unemployment, civil unrest, footballing triumph and tragedy – all have shaped this unique west coast city in the post-war years, shifting communities, accents and allegiances. If Capital of Culture year was a chance to invigorate the city

physically, the *Liverpool Map* was a prime opportunity to investigate past emotions and future aspirations.





You will have heard of Liverpool. You will have heard of Scousers. You may have heard of Capital of Culture 2008. The first two have been around for over 800 years and are likely never to be forgotten. 2008 may become a distant memory and risks fading from our collective consciousness. But we must not let it. It was a time of revival, renewal, regeneration and remembering.

Remembering, through our shared culture. Remembering who and what we were as much as we are. Remembering what had helped shape us. Remembering that we have some of the best museums in the world. Remembering that without our museums we cannot remember. Remembering that memories are made today and held in trust to help shape our future.

That is what the *Liverpool Map* symbolises.

Commissioned as part of the Open Culture: People's Projects, the map along with the *Liverpool Saga*, the Song and the Capital of Culture Bench, used the power of the media to harness the thoughts ideas and suggestions of the people of the city to not only try and define what it is to live

in Liverpool, but how they in fact see the boundaries of their state. Of place and mind.

Not merely an accepted administrative boundary drawn for bureaucratic neatness, but where are the real city boundaries that encompass the accent and state of mind that it is to be a Scouser? The identity that defines the real people of Liverpool?

An identity shaped by the winds and tides of fortune and adversity that have ebbed and flowed, like the great river on which bank the city sits. Since the granting of its Letters Patent in 1207 and the building of the world's first wet dock in 1715, trade, wealth, fortune, infamy and fame have flowed to and from the city as it stood, once at the centre of Em-

pire, but always on the edge of global change.

2008 then, seemed like a suitable opportunity to stop, take stock and mark this moment in time. History cannot be captured, remembered or shape our shared culture without the artefacts that act as our guides and interpretative tools. The *Liverpool Map* is such an artefact.

It links our 800th Anniversary and Capital of Culture year; it links the new Museum of Liverpool, its home, to its founding streets and traditional boundaries; and it links our collective consciousness to established views of the city. Alexis and I pledged financial support to allow Open Culture and National Museums Liverpool to commission this project, brought togeth-

er by the involvement of the Liverpool Daily Post and BBC Radio Merseyside, to make sure this was truly a piece of public art.

The Liverpool Map is not just a multi-layered collection of the city's past. Nor just the collected thoughts of its citizens; it is also intriguing as a piece of art. Its technical achievements surpass anything attempted in its field before, while its physical qualities are distinctive, vibrant, and enchantingly attractive.

The commission brief included the need to create 'a reminder in years to come of how people in Merseyside saw themselves, culturally, geographically and historically'. We saw a wide variety of approaches and ideas, but Inge Panneels and Jeffrey Sarmiento's

grand vision of Liverpool stood out, fusing as it does more than glass, entwining old and new, past glories and deep pain, our living and breathing cultural icons, beloved buildings; language, literature and landscape. Together, through their research, and the contributions of Merseyside's public, they painstakingly built up the multi-layered persona that defines what it is to come not from the city, but the state of place and mind that Scousers call, home.

So read on, learn more, recall lost memories, discover new things, but above all, come and have a look for yourselves.

Professor Phil Redmond

Chair, National Museums Liverpool and originator of the Liverpool Map project

A POTTED HISTORY

Though 'Liverpool' brings echoes of a romantic, distant past, most of the city you see now has appeared in little over 100 years; the Liver Buildings, Port of Liverpool and Cunard buildings, two cathedrals and Albert Dock are all relatively recent additions.

The neolithic Calder Stones – in the park of the same name – are older than Stonehenge. And while Bronze and Iron Age remains suggest long habitation, Liverpool remained a tiny village before the area's dominant Roman port, Chester, fell into decline. And while Smithdown, Toxteth and West Derby get a mention in the Domesday Book, it's not until 1190 that Liverpool is first mentioned by name, in a deed by Prince John.

The city we know was founded in 1207, when John – now King – signed the town's charter. But growth was slow, and it wasn't until 1880 that Queen Victoria made Liverpool a city.

Liverpool's estuary drove its growth: Elizabeth I granted letters of marque to sailors, giving them privateer status – sanctioned piracy – which generated great wealth. Trade with the US grew, driving the city's role in the slave trade. The first ship to sail was the Liverpool Merchant in 1699; the Kitty Amelia, the last slaver to leave Liverpool, set sail in 1807.

The world's first commercial wet dock in 1715 provided a harbour for sailing vessels, and the boom of Indus-

trial Revolution saw ships import and export goods around the world from Liverpool; the world's first passenger train line ran between Liverpool and Manchester and the city thrived in the 18th and 19th centuries, becoming the second city of the British Empire.

Liverpool's pre-eminent position as a port also made it a hub for passengers. Millions of travellers converged on Liverpool on their way to new lives in America, Canada, Australia and New Zealand. Some stayed by choice; some, on reaching Liverpool, were infamously told that they were in New York. Thousands of immigrants came in the opposite direction – notably the Irish in the 1830s and 1840s – but the city is also home to the oldest Black

African community in the UK and the oldest Chinese community in Europe.

Post-war, Liverpool's exports were more cultural than commercial; Merseybeat – and the Beatles – Dixie Dean, Bill Shankly, Kevin Keegan and Ian Rush. But although the city remained one of the world's most famous cultural brands – Ginsberg's 'centre of the human consciousness' – opportunities for people who lived here were fading.

A major west coast port, Liverpool was bombed heavily in WWII; bomb damage, planning law and housing renewal ideals conspired to break up some of the most close-knit communities, shipping them to new estates and outlying suburbs. Dock labour had sup-

ported thousands of families, but was largely wiped out by containerisation; unemployment soared, and thousands left the city in search of jobs and opportunities, while those who stayed fought for every opening.



But Liverpool is nothing if not a city with spirit. A combination of dedicated local leaders, passionate community groups and – depending on your view – direct government intervention, slowly began to turn things around. The 1990s saw a gradual improvement in job prospects and eco-

nomical growth, while by the new millennium Liverpool was again a city on the up, with cranes on the horizon, international cultural events, and a renewed sense of pride.

21ST CENTURY LIVERPOOL

Its year as European Capital of Culture, in 2008, was the culmination of nearly 15 years' regeneration in the city. From its precarious position in the late 1980s, European Objective One money – which confirmed Liverpool as one of the poorest regions in Europe – saw £3 billion ploughed into the local economy in a bid to create jobs, learning, new housing, businesses and opportunities.

Objective One allocated £700m to Merseyside in 1994, and European funding has played a part in nearly every major development in the city since.

From the Airport to the Arena, European cash contributed to more than 1,802 projects in the city between 2000 and 2008. It was quite a turnaround.

Early regeneration projects focused on the Albert Dock and International Garden Festival at Otterspool, in the wake of the 1981 riots in Liverpool 8, and were designed to revitalise the city as a tourist destination. Nearly three and a half million people visited the Garden Festival, while the Albert Dock's first phase of regeneration opened in the same year, and remains a key landmark



and contributor to the city's economy to this day.

Tate Liverpool opened at the Dock in 1988, while a second round of regeneration focused on the areas like the Ropewalks, as a string of private investors took the initiative in bringing city centre living back to Liverpool, and transforming its former warehouses and factories, decades after the last round of city centre dwellers had been moved out.

By the turn of the millennium, and with the duo of David Henshaw (the council's chief exec) and Mike Storey (council leader) in charge at the Town Hall, the city decided to bid for Capital of Culture status in 2000. It made

it onto a shortlist of six cities from the original 12 contenders, and on 4 June 2003, it was announced that the city of Liverpool had beaten Newcastle - Gateshead, Bristol, Birmingham, Cardiff and Oxford to the crown of European Capital of Culture 2008.

The years building up to culture year saw a significant shift in momentum, with an ambitious programme of public realm works – largely defined by the local population as roadworks – or 'the big dig', as the council would have it.

Preparations for Capital of Culture including themed years for each of the preceding years, including 2003 as Year of Learning, 2004 as the Year of Faith, 2005 as Year of the Sea, 2006 as

Year of Performance, 2007 as a heritage year (marked by the city's 800th birthday); 2009 was to be the Year of the Environment, and 2010 Year of Health and Wellbeing.

The year after Liverpool was awarded Capital of Culture status, property developer Grosvenor started work on the Paradise Project, a £920 million remodelling of the city centre area between Paradise Street, Church/Lord Street and the waterfront, which involved the most significant changes to the city centre since its post-war reconstruction. Renamed 'Liverpool One' the shopping and leisure centre opened in May 2008. In little over five years, the face of the city centre had changed completely.

BEGINNINGS



King John granted Liverpool's charter in 1207, beginning the transformation that would see a once - small village on the murky river Mersey grow into one of the greatest ports of the British Empire, and trading hub of the Industrial North.



'Liuerpul' – as appears on the charter – was made up of just seven streets at the time (see page 40); Dale Street, Castle Street, Chapel Street, Moor Street (now Tithebarn), Bancke Street (now Water Street), Peppard Street (Old Hall Street) and Juggler Street (High Street). King John saw Liverpool as an ideal base for his ships to invade Ireland and Wales – he built a castle at the end of what we now call Castle Street, although there were

only between 100 and 200 residents of the village at the time.

It remained a small fishing village until the building of a harbour in 1635 created a safe area for ships to unload. In the early 1700s the village finally began to grow into a town, with a population of about 7,000 people, and buildings like the Bluecoat Chambers popped up.

The 1660s onwards saw an expansion of trade with America, but it wasn't until the 18th century that the town really started to grow; the construction of the world's first dock system in 1715 allowed ships safe haven from the strong tides of the Mersey, for construction, repair and to load and un-

load cargo, and trade from the West Indies, Ireland and Europe fuelled Liverpool's expansion. The city was booming; the old 'Pool of Liverpool' – which is pretty much under the Liverpool One complex these days – had long been surpassed by Jesse Hartley's tidal dock system; by the early 19th century, 40% of the world's trade passed through the town's docks.

Liverpool's later seafaring history has been well documented as it – along with Bristol – made up one of the three shameful points of the Slavery Triangle, transporting British-made goods to Africa, in exchange for slaves who then crossed the Atlantic to be sold in the cotton plantations of America's south.

Wealth from the slave trade, alongside financial and insurance expertise, saw Liverpool become the second city of the British Empire. Prosperity oozed through its architecture: from St George's Hall and the Cunard Building; Albert Dock, Central Library and the Walker Art Gallery to the Lyceum, Athenaeum, and merchants' houses that ring the Victorian parks.

It has more than 2,500 listed buildings, with a variety and flamboyance of architectural styles that led English Heritage to call it 'England's finest Victorian city'. Liverpool's 'Maritime Mercantile City' – which stretches from the waterfront to William Brown Street – was also awarded UNESCO World Heritage Site status in 2004.



Liverpool's 800th birthday in 2007 took the shape of a Year of Heritage, and allowed the city the opportunity to start building up a programme of events to celebrate its rich cultural traditions.

The city's 800th birthday – which marked the signing of its charter – on the 28 August 2007, was dominated by a procession celebrating 800 years of local history, alongside a civic service. But the entire year was punctuated by events drawing attention to Liverpool's long history of achievement and innovation. A church service at the city's parish church, St Nicholas, was attended by a civic delegation, with representatives from Liverpool's twin cities, including Dublin, Cologne and Shang-

800 YEARS

hai, before a spectacular fireworks display over the city's Mersey drew the birthday celebrations to an end.

The service was followed by a historical pageant and procession – involving more than 1500 people representing achievements in public health, medicine and transport through to the invention of Meccano and the rise of Beatlemania, and echoing the 700th anniversary celebrations in 1907.

The mood was one of celebration, but also recognition: 74,000 pupils in Liverpool's primary and secondary schools received a commemorative 2007 coin, while 145 schools held parties of their own, celebrating the city's history, birthday and achievements.

Liverpool's 800th birthday coincided with the 200th anniversary of the abolition of slavery, in 1807, to which its fortunes had been irretrievably tied. Recognition was another key theme of the year, with National Museums Liverpool opening its £10m International Slavery Museum at the Albert Dock on August 23rd.

Public contributions came in the form of the *Liverpool Saga*, an 800-line poem written by local people, which was also used in the community section of the Liverpool Map (see page 64). Roger McGough wrote the opening and finishing two lines, before the remaining 792 lines were crafted from over 3,000 lines sent in by local people, and whittled into shaped

by local poets Dave Ward and Sylvia Hikins. McGough said at the time of his opening lines: 'There were no processors in those days, no electricity – it would have been a quill pen or something started the whole thing and then 800 years later people working on a computer so it's that moment of time and all that length of time.' You can see more of the verse on page 65.

The 3,000 lines submitted for the Saga covered subjects like the river, factories, sport, families, disasters and music across 800 years of Liverpool history. The sheer depth and breadth of entries gives you some idea just how much content there was to fit into the *Liverpool Map*.



EUROPEAN CAPITAL OF CULTURE

Capital of Culture focused the eyes – and ears – of the world on Liverpool. It was a year-long celebration of everything good about the city, with a string of events, from Ringo Starr drumming on the roof of St George's Hall for the opening ceremony, Liverpool the Musical, La Machine's spider, to Go Superlambananas (see pic) and Paul McCartney's Sound gig at Anfield.

Research on the year's impact shows that two thirds of the city's residents attended at least one Capital of Culture event, as established festivals like the Biennial and Mathew Street Festival were woven in with one-offs like Tate Liverpool's Klimt exhibition – the first retrospective of the Austrian artist in this country – and spe-

cially commissioned 2008 events run by the city's Culture Company.

Events took place across the city; the art world descended on *Ben Johnson's Liverpool Panorama* (which is also on display in the Museum of Liverpool), Manet, Monet, Tissot and Hoppper at the Walker Art Gallery's Art in the *Age of Steam*, and Gustav Klimt at Tate Liverpool; Power Plant in Calderstones Park and *The Emperor and the Tiger* in Newsham took people out of the city centre for performances in the parks. It was a year of both small and spectacular; unique one-offs and large-scale crowd-pleasers. The Spider La Princesse and the Superlambanana as captured the public imagination, bringing droves of residents and tour-

ists into the city centre – and beyond.

It was unquestionably a catalyst for physical regeneration, and brought people back to the city who had not visited for years – and plenty who had never been before either... The city centre not only looked different, but felt different too. While you can read all about the economic effects of the year on the next page, the mood at the time was –perhaps tinged with a little relief – but celebratory and fear-somely proud. Liverpool had remembered – after years of fearing and hearing the worst, and being the example to avoid – what it was great at. It was, in the words of Professor Phil Redmond, a time of 'revival, renewal, regeneration and remembering.'

CHANGING TIMES

Liverpool underwent massive physical regeneration on a wave of investment and optimism that culminated in the award of European Capital of Culture. The city centre has changed dramatically in just ten years, with its physical centre shifting towards the river with the development of Liv-



erpool One, the resurgence of the Albert Dock and the new arena at Kings Dock; progress continued in the aftermath of 2008, with Lime Street station again revealing its original facade, the development of Central Village, further growth of Liverpool One and, of course, the opening of the new Museum of Liverpool at the Pier Head.

But it wasn't just the skyline that saw something of a transformation. The year had a huge impact both nationally and internationally. According to a joint University of

Liverpool and John Moores University report, it brought an income of £130 million in to the city over six years, the highest of any European Capital of Culture to date.

Capital of Culture events accounted for 35% of all visits to the city, and of the 2.6 million European and global visitors in 2008, 97% of them were first timers, propelling Liverpool to the sixth most-visited city in the UK.

Dr Beatriz Garcia, director of the research programme, Impacts 08, said: 'We found that general opinion of Liverpool was informed by very dated images of the city, which ranged from positive but fixed associations with the Beatles in the 1960s to more

negative views of social deprivation in the 1980s.'

Nearly 10 million visitors to the city and the wider region – an increase of 34% – spent over £750 million during their visits to Liverpool, helping support 15,000 jobs. And, despite widespread scepticism that the positive effects of the Capital of Culture award wouldn't be felt outside the city centre, a five-year research project into the impact of Capital of Culture found that 85% of Liverpool residents agreed that it was a better place to live than before.

It was not just locally that opinions of Liverpool changed, as Liverpool was already pretty confident of its own

special place in the world, but after its nomination in 2003, national and local media coverage more than doubled, and started to focus on the city's cultural assets, rather than the traditional emphasis on negative social issues. The study found that media representation became less polarised, with a wealth of stories about the city's cultural offer and economic change: in 2007 - 2008, positive stories about Liverpool in the national press grew by 71%.

And the recognition followed; Liverpool was named the country's friendliest city, best city for nightlife, fastest growing economy outside London and the second safest city to live in the UK.

One of the cornerstones of the Liverpool bid – legacy – remained something the council was keen to cement in the years after 2008. The award in 2003 began the first of a series of themed years, designed to run up and finally succeed Capital of Culture. 2003 became the city's Year of Learning, 2004 the Year of Faith, 2005 the Year of the Sea, and 2006 the Year of Performance. The city celebrated its 800th birthday – the anniversary of King John signing its charter – in 2007, before the year of Culture in 2008 itself. In the aftermath, 2009 became the Year of the Environment, and 2010 - 2020 the year, and then decade, of health and wellbeing. Only time will tell how lasting the impact will be when the themed years finish in 2020.

WHAT NEXT?

One of the major concerns of 2008 was its 'legacy'; this was not to be a year of money being pumped into the



city and just to let the visitors and their money leave on the 31st of December 2008 and let the city slip back to darker times. So Capital of Culture had to create something sustainable in the city. Open Culture, which

was part of the '08 team, was created with the specific remit of involving people across Merseyside in cul-

ture. Not just creating it for them to attend, and then leave, but encouraging them to set up their own projects, shows and events, businesses – and helping them communicate about what was going on in general. Handily, Professor Phil Redmond – culture supremo of Capital of Culture year, and creator of Open Culture, was also the chair of National Museums Liverpool. Open Culture became the facilitators of the Liverpool Map, ensuring Merseyside's general public – past and present – had their chance to say their piece on the city's icons, geography and culture.

On 30 April 2008 the commission was announced, and Belgian artist Inge

Panneels and American sculptor Jeffrey Sarmiento put forward the idea of a very large glass map, to stand two metres high. It would be made up of sheet glass, fused together during firing. The layering of colour and printed glass would build a distinctive, three-dimensional piece of art – you can read more about their proposal in the technical section, on page 82.

Charlotte Corrie, a director at Open Culture, who was on the judging panel, says that the artists stood out immediately as two very obviously international, talented and hardworking artists, and the opportunity to work closely with a unique partner like the National Glass Centre in Sunderland was also a factor in their decision-

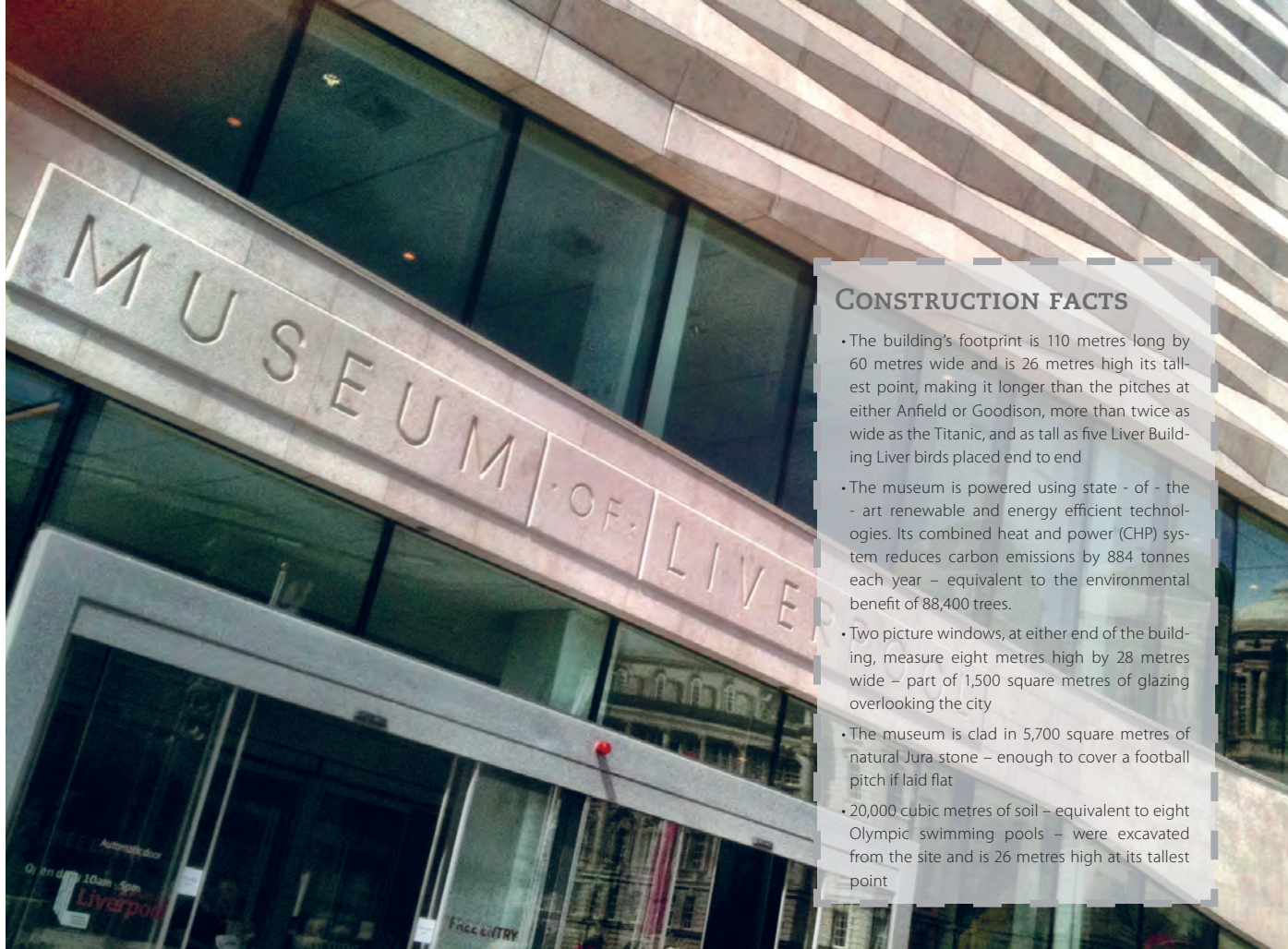
making process. 'Although the project had always been called the *Liverpool Map*, we didn't specify that the artists used an actual map in the final piece, so it was interesting that Jeff and Inge proposed to use the properties of different types of glass to incorporate physical maps,' she says. 'Glass as a medium was perfect to translate the many layers of the project – geographically, historically and culturally – and there was obviously the attraction because they'd never made a piece so big, so it was the chance to create a real first. It also offered an opportunity to incorporate the community and the *Liverpool Saga* into the piece, which fitted in with the Open Culture and National Museums Liverpool ethos...'

FROM THE BLOG

This story starts in June 2008 with a small advert in the artist magazine A - N. The advert sounded intriguing; artists were sought to submit an outline proposal for a cultural map of Liverpool to celebrate its City of Culture 2008 with a permanent piece of sculpture that was to be sited in the new Museum of Liverpool.

31 JULY 2008

Jeff and I are both sent a letter to tell us our proposal has made a shortlist of two from a nationwide call for submissions and invite us for interview. We are very excited; Jeff in particular. We both work with glass but work in very different ways. I predominantly work to commission, which involves submitting applications, doing speculative proposals, going for interviews, meeting client groups, discussions with architects, working with contractors... Jeff works very differently as a gallery artist. He works mostly by himself in the studio producing world-class glass sculptures and he's a technical maverick. As such we combined our experiences in the proposal.



CONSTRUCTION FACTS

- The building's footprint is 110 metres long by 60 metres wide and is 26 metres high its tallest point, making it longer than the pitches at either Anfield or Goodison, more than twice as wide as the Titanic, and as tall as five Liver Building Liver birds placed end to end
- The museum is powered using state-of-the-art renewable and energy efficient technologies. Its combined heat and power (CHP) system reduces carbon emissions by 884 tonnes each year – equivalent to the environmental benefit of 88,400 trees.
- Two picture windows, at either end of the building, measure eight metres high by 28 metres wide – part of 1,500 square metres of glazing overlooking the city
- The museum is clad in 5,700 square metres of natural Jura stone – enough to cover a football pitch if laid flat
- 20,000 cubic metres of soil – equivalent to eight Olympic swimming pools – were excavated from the site and is 26 metres high at its tallest point

A NEW MUSEUM FOR LIVERPOOL

Of course, the *Liverpool Map* would need a home. As early as 2001 plans had begun to create a Museum of Liverpool on the waterfront, channelling Liverpool's passions and cultural pursuits into one showcase building.

Preparation for the new museum began in 2006, when the Museum of Liverpool Life closed to be replaced with a larger, purpose - built museum.

Funded by a number of different agencies and institutions, including the Northwest Regional Development Agency, European Regional Development Fund, Heritage Lottery Fund, Department for Culture, Media and Sport and the Garfield Weston Foundation, amongst others, the museum

opened in July 2011, when galleries Global City, Wondrous Place, and the People's Republic – where the map now stands – opened their doors.

The X-shaped museum is the largest newly-built national museum in the UK for more than 100 years. With 8,000 square metres of public space across three floors, it's home to around 6,000 objects collected by National Museums Liverpool, many of which have never been displayed before.

The museum won the Council of Europe Museum Prize for 2013, and has been shortlisted for the 2013 European Museum of the Year (still to be announced as we published).

FROM THE BLOG

June 2009

Because the MoL team are so impressed with our proposal, they've moved it from its initial site in the lobby to one of the main gallery spaces. The new MoL will have two main galleries – we will be in the gallery with an eight metre - tall window, overlooking the Mersey and the Liver Building. A great spot indeed. This does mean that there will be a LOT more light flooding the piece. Originally it was to be sited against a wall with no backlighting and we'd proposed to use very little coloured glass, instead bringing in colour with the opaque glass enamels. We're now bringing in strong colours that can withstand this barrage of light; bright red, yellow, blue and sea blue. This density of colour is traditionally used in stained glass windows. We are combining this with printed imagery. The Map will now also be viewed from both sides so the printing will be placed so as to be able to be interpreted both from the front and back.

THE PEOPLES' CHOICE



Billed as giving everyone in Liverpool the chance to 'leave their legacy in the form of a piece of art', the public was invited to vote for a series of people, places and icons to include in the map on the Liverpool Daily Post website.

The Daily Post was involved in the map project from an early stage, launching the project in November 2007 and generating a series of articles throughout Capital of Culture year.

In a series of features on the map during its research phase, arts ed-

itor Laura Davis collated information, opinions and updates about the map to prompt responses and interaction with the voting public. Talking about places that should or shouldn't

'THE MAP SHOULD EMBRACE LOCAL, NATIONAL AND INTERNATIONAL AREAS, HIGHLIGHTING LIVERPOOL'S GLOBAL INFLUENCES; IT WILL BE A LEGACY FOR THE MUSEUM THAT HAS TRULY BEEN DIRECTED BY THE PEOPLE OF LIVERPOOL,' SAID THE BRIEF.

be included, Jon Culshaw, the Ormskirk - born TV impressionist, said: 'Ormskirk and Liverpool are neighbours and they work with each other. Eve-

ryone who lives there regularly hops on the train to spend time in the city and many people have moved out to Ormskirk from there, increasing the influence. Ormskirk is in Liverpool's field of gravity and when a city has

such a strong personality its influence spreads to the areas around it.' David Cobham, however – a Daily Post reader – felt strongly the opposite: 'I nominate the whole of Southport to be excluded from the Liverpool Map, as it has its own unique identity.'

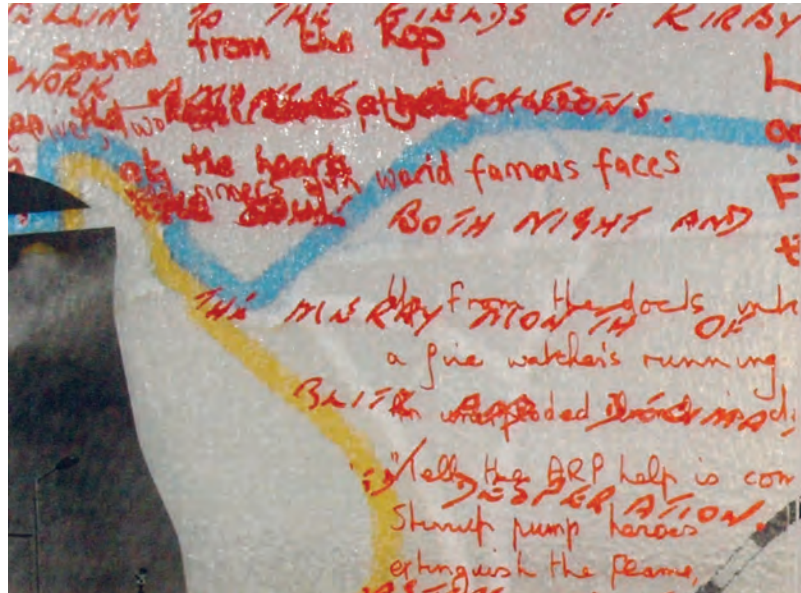
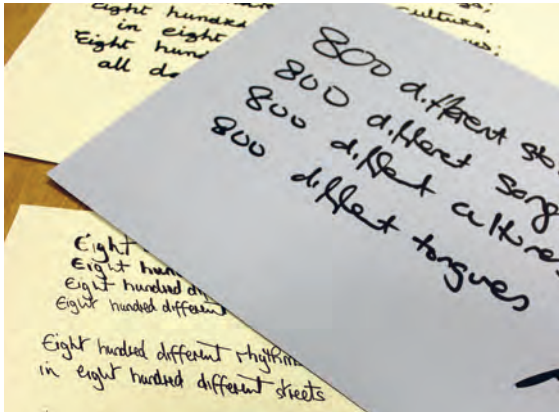
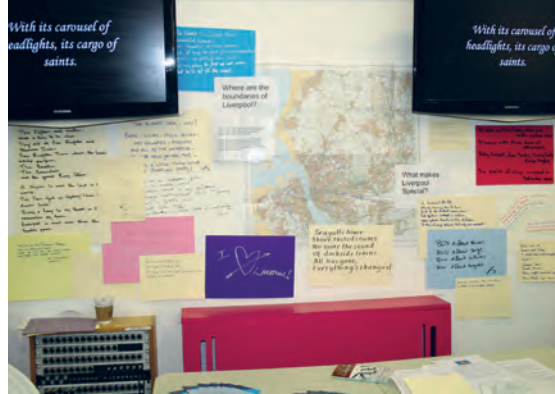
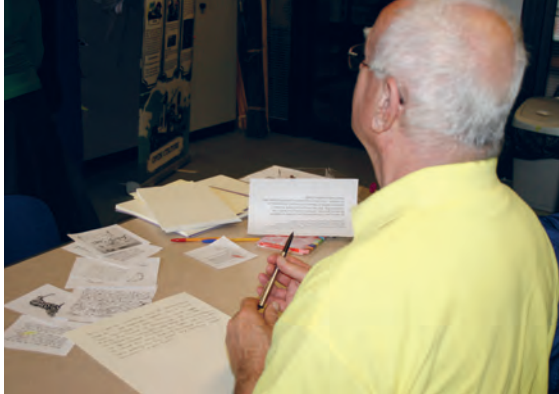
As artist Inge Panneels explains, 'the brief was not for it to just be a his-

torical statement, but to be a cultural snapshot of Liverpool in 2008.' Suggestions for areas to include, global links and significant people and places were collected via emails and forums, and the results presented in an online survey for the public vote. They were asked to choose which places would fall within Liverpool's boundary lines, the city's phys-

ical icons, and the people who would be represent Liverpool's music scene, writers, performers, visual arts, sporting history, and 'significant others'.

The results of the polls were translated into the design, embedding the city's heritage and cultural icons into each layer of glass.

You can see the icons chosen on each of the layers on the next section, but these are the public responses to the areas that should fall inside the city's boundary lines, based on nominations received (as you'll see from the percentages, people could vote for more than one area):	Bootle: 60.6%	Crosby: 51.6%	Hale Village: 36.2%	Runcorn: 20.9%	Ashton - in - Makerfield: 9.4%
	Woolton: 60.6%	Netherton: 46.9%	Formby: 35%	Southport: 20.9%	Isle of Mann: 9.4%
	West Derby: 60.2%	Maghull: 46.1%	Thornton: 33.5%	Widnes: 20.5%	Winsford: 9.4%
	Allerton: 59.8%	Eldonian Village: 45.3%	Ince Blundell: 30.3%	Ellesmere Port: 16.9%	Wigan: 8.3%
	Walton: 56.7%	Knowsley Hall: 44.1%	Rainhill: 30.3%	St Helens: 16.9%	Bache: 7.9%
	Halewood: 55.9%	Fairfield: 42.5%	Wirral: 30.3%	Newton - le - Willows: 13.8%	Flintshire: 7.9%
	Huyton: 55.5%	National Wildflower Centre (Knowsley): 39.4%	Freshfield: 29.5%	Frodsham: 11.8%	Hindley: 7.9%
	Edge Hill: 54.7%	Blundellsands: 39%	Skelmersdale: 25.6%	Garswood: 10.6%	Wrexham: 7.9%
	Litherland: 52.4%	Melling: 37%	Orrell: 22.8%	Chester: 9.8%	
	Waterloo: 52.4%		Ormskirk: 21.3%		



THE PEOPLES' CHOICE

The *Liverpool Map* had to represent the people of the city; it fired the feelings, ideas and aspirations of the people of Liverpool in 2008 in six-foot glass columns. Thousands of votes were cast across the Daily Post's online poll, and National Museums Liverpool's community workshops.

To include a very personal link with the map's 'community' feeling, members of the public from across the region were invited to attend handwriting sessions at the Merseyside Maritime Museum and BBC Radio Merseyside, where they were asked to write creatively about the city, and chose their favourite sections from the *Liverpool Saga* to copy out in their own handwriting for the layer.

The saga had been created by Radio Merseyside listeners as part of the Open Culture project, to celebrate the city's 800th anniversary in 2007; it numbers 800 lines of poetry, chosen from more than 3,000 submitted lines, and topped and tailed by Mersey Sound poet and Scaffold singer, Roger McGough. Acclaimed local poets Dave Ward and Sylvia Hikins, who both attended the community handwriting sessions in April 2008, whittled the final lines of the saga down from more than 3,000.

Georgina Young, a curator at the Museum of Liverpool, which houses the *Liverpool Map*, said: 'It's fantastic that the artists have chosen to include the Liverpool Saga as a community layer

in the map's design. Devised and written by the people of Liverpool, it reflects the heart and history of the city and their impact on its past, present and future. The finished glass piece should say something about, and mean something to the people of Liverpool. Their involvement in defining the map's geographical, historical and cultural boundaries means that it can truly reflect the city's perception of itself.'

Professor Phil Redmond, chair of National Museums Liverpool, (and Open Culture), added: 'Culture isn't just about attending or creating events, it is also about artefacts and how those artefacts form part of our collective and inherited culture.'

MAPPING A SENSE OF PLACE

‘The principle was what Liverpoolians see as their city, not the physical boundary,’ Redmond said at the time: ‘The *Liverpool Map* will be a lasting legacy for the city and is a great opportunity for an artist to leave their work as a reminder in years to come of how people in Merseyside saw themselves, culturally, geographically and historically.’

Artists Inge Panneels and Jeff Sarmiento began their creative journey after meeting at the National Glass Centre, at the University of Sunderland, where they would design and fire the Liverpool Map. The department is one of the largest in Europe, enjoying international status and is a centre for excellence in the field of

glass, architectural glass and ceramics. Its studio includes one of the largest kilns in Europe, which was used to fire the Liverpool Map.

Panneels is a Belgian artist who has dedicated the last 15 years to creating architectural glass projects including the NHS, Belgian Radio, Lloyds TSB and the Scottish Executive with work in public collections in Denmark, Belgium and the UK. American artist Sarmiento is a Reader at the University of Sunderland, and has exhibited widely across the globe. His work is found in public collections in Denmark, Belgium, the UK and US

Both work exclusively in glass, suggesting in their proposal: ‘Glass is

an ideal medium for such a complex amount of information to be integrated into one piece of work. Merseyside’s strong position within the history of the glass industry – with St Helens being one of the most famous glassmaking centres in the world – made the choice of material even more appropriate.’

Jeff and Inge’s proposal for the *Liverpool Map* called for a ‘monumental multilayered glass monolith’. But with a plan to build up stacks of sheet glass, printed with imagery, and including coloured segments and cut-outs, researching the content of those layers would be a major task...

Inge and Jeff began their research by reviewing historic maps of Liverpool and working their way through the choices and winners of the Daily Post vote, before heading to Liverpool on a research trip in November 2008.

In her blog, Inge explained the difficulty interpreting the votes, and pinning down the area the 'emotional boundary' should cover: 'December 2008: The Daily Post is the media partner of the project and has been conducting polls enquiring where people feel the boundary of Liverpool is, and what they feel is Liverpool? The poll results prove to be difficult to interpret into concrete boundary lines and lead to some excited discussions around the table with Phil Redmond and the team.'

Research continued apace, using books and internet resources, consulting staff at NML, more work interpreting the Daily Post's findings, as well as insights they'd gained on visits



to the city. Museum of Liverpool staff also gathered a research collection, which included:

- › A copy of **Liverpool 800**, a history of the city
- › A copy of Garlic Press' **Liverpool the 1st 1000 years**

- › A content summary for the **Liverpool Story**, an audio-visual history that features in the new museum
- › Images showing the features voted for by Daily Post readers.



Finally, after nine months of work, they were ready to start...

PART TWO –



THE MAP'S LAYERS



Liverpool's strong sense of identity is based on a complex, adventurous history, built from layers of emigration, immigration, suburbanisation and adventures on the high seas. So the intricacy of 17 layers of glass proved a perfect way to encapsulate its rich and varied sense of self. Political, philanthropic, ground-breaking, hard working, fun - and always passionate - the city's many sides are encapsulated in the people it gave to the world, and the people it took to its heart, the buildings, places and music and memories it reveres. Weaving threads of history, geography, arts, culture, community, sport and sociology, these are the places, people and things that best represent Liverpool, chosen by the people of Liverpool.



PART TWO – THE MAP’S LAYERS

The *Liverpool Map* is just one of a series of public responses to our year as European Capital of Culture that Open Culture was involved in. Our role, as a part of the Culture Company, was to make sure that people across the city got the chance to get involved in culture locally – not just going along to events and watching, but giving them a real chance to feel involved, and make their voice heard.

The problem, as ever with commissioning a piece of art, is that it’s just one person, or one team’s interpretation. The beauty of Inge and Jeff’s proposal was its inclusivity – glass was the perfect medium to show many different views of Liverpool, and the city is nothing if not many-layered.

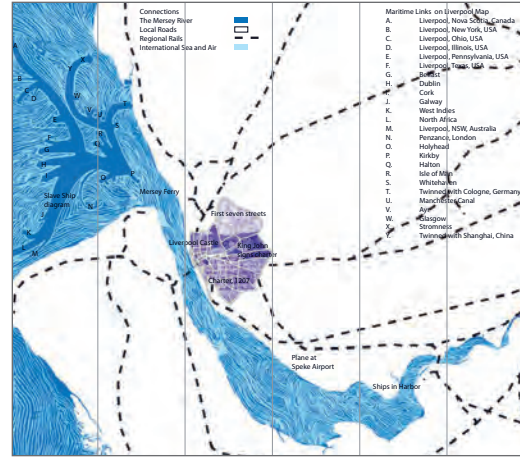
Working with the Daily Post, Radio Merseyside and National Museums Liverpool gave us huge reach across Merseyside, and the range of opinions, ideas and interpretations we had was broad, challenging – and gave Inge and Jeff a few headaches, I’m sure.

How to best represent what was important to the public was the challenge, but, again one of the strengths of the map. Liverpool has such a strong storytelling tradition – through salty sea dog tales, music, and poetry – and having 16 layers to tell the city’s story – to add colour, opinion, and variety – undoubtedly made life easier. Although the arguments over Liverpool’s boundaries will no doubt rumble on for generations.

The map’s home, in the new Museum of Liverpool, also informed its aims. The museum’s galleries – Wondrous Place, People’s Republic, Global City – framed some of the themes that capture the public imagination; culture, sport, music, history and politics were always going to be vital things to include. And still I’m sure there’s so much of Liverpool that remains outside the scope of the map. Nevertheless, we hope that this book goes some way to showing the range, diversity, pride and passions of the city that the Liverpool Map has captured so vividly.

*Charlotte Corrie, director
Open Culture*

HISTORY



So, what's in a place? Liverpool's charter was signed by King John in 1207, making 2007 its 800th birthday; but its defining history is much more recent, from the growth of the docks, the slave trade, immigration and emigration, to a hub handling 40% of world trade. The map's history section captures its origins and growth to second city of the Empire.



LAYER I:

Liverpool has geography on its side. If it weren't for the city's position on the north western coast, making it a

let of which few people had ever heard. Yet, 'Liverpool' is a name that's known across the world, spread in the words of sea shanties, maritime literature and the chants of football fans,



However, if some 9,000 years ago, you were to have visited the spot where the city stands today, it would have looked very different. Geographers believe the sea level at that time was around 20m lower than it is now, so Liverpool was not

convenient spot for launching ships on the coast at all but surrounded by land. The coastline would have lain first to Ireland under King John and, centuries later, to the New World, it would have remained a small ham- a lot further to the west, somewhere around Anglesey in North Wales.

THE LIE OF THE LAND

Mixed forests of hazel, lime, elm and oak trees covered the land and boggy fen, such as those you still find in Norfolk today, lay further inland.

Although the name Liverpool, or rather 'Liuerpul' meaning 'muddy pool', does not appear in written documentation until around 1190, there is evidence to prove the area was inhabited for many thousands of years before this.

An archaeological dig of farmland in Croxteth Park revealed signs of life from the late Mesolithic period, somewhere around 4,000 to 5,000BC. Just like several other sites within a radius of a few miles, it is believed to have been used as a campsite by prehistoric tribes during hunting trips. By

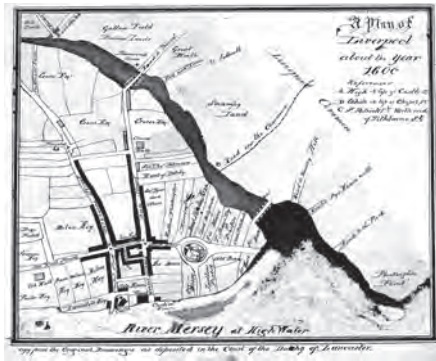
analysing grains of pollen trapped in the peat, archaeologists were able to discover that the area was covered in dense woodland, providing timber for people to build shelter and fires.

In Calderstones Park are standing stones left behind by druids, and some 25 miles north along the coastline at Formby beach, where every so often waves wash away the protective layers of silt and sand covering prehistoric footprints, it's possible to see traces of life 4,000 years ago for yourself. The footprints are usually visible for just a short period of time until they are eroded forever by the Irish Sea, but 3D reproductions, created by National Museums Liverpool conservators, are on display at the Museum of Liv-

erpool, where visitors can literally find out what it is like to step into the footsteps of people living in Merseyside 4,000 years ago.

Thousands of years later, the area where the city stands today was simply a small inlet of the River Mersey. Before Liverpool existed, the farms of West Derby were being recorded in the Domesday Book of 1086 as villages in their own right rather than part of the city's urban sprawl. And so it remained throughout the medieval period, a small fishing hamlet overshadowed by nearby Preston, Wigan and the international port of Chester, until King John saw fit to grant his Letters Patent, allowing Liverpool to become a centre for trade, in 1207.

LAYER 2:



Our great city was born insignificant - an unimpressive inlet of the Mersey River given the unromantic name Liuerpul or “muddy pool”. Its assets proved no temptation for the conquering Romans and was not important enough to be recorded in the Domesday Book of 1086 although West Derby, Toxteth, Childwall and Walton were all included. For centu-

ries its people were forced to submit to the control of authorities in Chester, an international port with a superior customs office.

Then on August 28, 1207, King John granted a letters patent and in a single gesture transformed Liverpool's future. This document allowed the town to develop commercially, outside the control of the lords of Chester. Settlers were encouraged to move to Liverpool and for 12d rent would receive a plot of land known as a burgage. The letters patent also conveyed the right to hold weekly markets and an annual fair. In return, King John had established an embarkation point for Ireland, over which he claimed sovereignty.

A grid of six streets was laid out, and a seventh, Castle Street, was added around 1235 when the town's castle was built. Standing on a constructed plateau over a moat cut from solid rock, on what is now Derby Square, the sandstone edifice was surrounded on three sides by water, making it an excellent defensive position. Two towers flanked its gatehouse, while a further three round towers stood at each of its other corners. To its East side was an orchard, while inside it had a hall, a chapel, its own brewery and bakehouse.

Castle Street led down from the gatehouse and continued on to Juggler Street (now High Street) at the point where Liverpool Town Hall

FROM SEVEN STREETS

now stands. To the left of this crossroads was Water Street and to the right Dale Street, both still in existence. Juggler Street continued on to Whiteacre Street (now Old Hall Street), with Chapel Street to the left and Moor Street (now Tithebarn Street) to the right. Today, this area of the city centre has many more roads but they are based around the original medieval street plan.

By Tudor times the seven streets were dishevelled. The once formidable Liverpool castle was a sorry sight – crumbling walls, the gatehouse and its towers roofless. The burgages were already being split up, with cottages built behind the rows of single timber and daub houses. The trees and hedg-

es that had been planted to mark the boundaries of each plot were overgrown.

And the stink! Refuse was dumped in the drinking wells: unfenced middens built in front of people's homes; animals kept in the town, chamber pots emptied into the street; leather workers soaking bark; weavers washing yarn and soaking flax; butchers hanging up their meat.

In 1515, a meeting and courthouse was established in a new thatched house on Juggler Street, its lower floor designated as a warehouse and town gaol.

Worship took place in the stone chapels of St Nicholas and St Mary, at the

top of Water Street where a later version of St Nicholas' Church stands today. Taxation lists from the late 16th century show that the wealthier inhabitants lived on this road, while Castle and Dale streets were home to a mixture of the well off and those who paid lower than average taxes.

Today, the seven streets are the heart of Liverpool's business district, home to shops, restaurants, law firms, accountancy firms and other commercial ventures. They may be almost unrecognisable from the original seven streets of the 13th century, but traces of their history can be found if you are prepared to look closely.

LAYER 3:

The first landmark a sailor arriving in Liverpool would encounter was the rows of warehouses lining the Mersey. Wooden masts jabbed the skyline and the narrow streets near the port swarmed with sailors of all nationalities. The 19th century's great age of sail saw the city expand its reach across the globe, linking Africa, the West Indies and North America – with their raw materials – to the manufacturing centres of North West England.

Steam allowed faster journey times, further growing the port. Liner companies including White Star Line and Cunard established headquarters here and mass immigration to the New World saw some nine million people leave via Liverpool's docks.

Of course, it's impossible to talk about Liverpool's great maritime age without mentioning its shameful connection to the transatlantic slave trade. Much of the city's wealth came from its ships travelling to the west coast of Africa, exchanging their goods for people and transporting them under horrific conditions to the Americas, where they were sold as slaves in return for sugar, coffee, tobacco, rice and cotton. Between 1695 and slavery's abolition in 1807, ships connected to the trade made 5,300 journeys from Liverpool.

On September 15, 1840, the world's first rail fatality occurred on what should have been a jubilous day – the opening of the Liverpool to Manches-

ter railway. Politician William Huskisson had lobbied for the city's railway bill in Parliament. Stephenson's Rocket knocked Huskisson down after he left his carriage onboard another train to speak with the Duke of Wellington, the prime minister, during a brief stop. One of his legs was badly mangled and he died later the same day. Despite a tragic beginning for the rail link, it would not mar its fortune.

The idea for the line came from engineer Henry Booth, to speed up the transport of goods from Liverpool to Manchester – a journey he claimed sometimes took longer than their 21-day trip from New York. An Act of Parliament in 1826 secured the undertaking, with mechanical engineer

TRANSPORT DRIVES THE TOWN FORWARD

George Stephenson helping Booth. As well as the tracks, 63 bridges, cuttings, embankments, a tunnel, stations and warehouses were constructed.

In 1829, Stephenson's Rocket, won the Rainhill Trials competition to find an engine that could pull both passengers and freight, leading a line of seven of Stephenson's locomotives on the inaugural journey. Despite the tragedy of that first day, the railway was a great success. In subsequent months the number of stagecoaches carrying passengers between the cities fell from 30 to one. A single engine could pull some 164 tons of freight from Liverpool to Manchester in 2½ hours – a load that, before steam, would have taken 70 horses to draw.

Long before the railway, the city's canal links allowed it to take advantage of the Industrial Revolution. Thomas Steers, Liverpool's first dock master, oversaw improvements to the



River Weaver so that salt could be more easily transported from mines in Cheshire. In the mid - 1700s, the Mersey was widened to allow boats to take cotton to Manchester, but it wasn't enough to meet demand. The

cutting of the Sankey Canal in 1755 provided a direct link between Liverpool and the St Helens coalfields – when it opened in 1758 it was the first major artificial waterway to be



constructed in England since Roman times and the world's first true canal. Canal building began again, connecting Liverpool to Leeds over 127 miles.

LAYER 4:

Settlers in the New World often named their homes after the places they'd left behind and those from Liverpool were no exception. The Liverpool Map features seven Liverpools:

NOVA SCOTIA, CANADA

Founded as a fishing port in 1759 by some of the 2,000 families who moved to the Canadian maritime provinces from New England during the 18th century, this Liverpool lies on its own river Mersey. In the summer of 2008, artist Simon Faithful sketched scenes of his 3,000-mile journey between the two Liverpools, taken by container ship, train and ferry. Many of his pictures have been sandblasted into the paving stones and etched into the glass windows at

the new entrance to Lime Street Station as a work of public art.

NEW YORK, US

When the New York state surveyor general relaid the streets of Little Ireland in Onondaga County, he took the opportunity to change the village's name to Liverpool. It was incorporated in April 1830 and was home to a major salt manufacturer, a saw mill, a sash, blind and casket factory and a cigar manufacturer. From the 1870s its main industry was willow weaving, with around 360,000 baskets exported across the country at its peak in 1892. It has a population of around 2,300 people but attracts more than one million visitors per year drawn to the shores of Onodaga Lake.

OHIO, US

Dubbed 'the pottery capital of the world' and 'crockery city', East Liverpool once produced over half of the ceramics in the US, but has declined due to cheaper production costs in countries like China and Taiwan. It is also known for a less savoury reason – as the place the notorious bank robber Charles Arthur 'Pretty Boy' Floyd was taken for embalming in 1934 after being killed in a nearby apple orchard, pursued by the FBI and local police.

ILLINOIS, US

The smallest Liverpool on the map is in Fulton County, Illinois. It has a population of just over 100 people and takes up 0.1 squares miles of land. Despite its size, it has its own mayor.

LIVERPOOL AROUND THE WORLD

PENNSYLVANIA, US

Settled in 1808 and incorporated in 1832, this Liverpool is found on the banks of the Susquehanna River in Perry County, Pennsylvania, and was once one of the busiest towns on the Pennsylvania canal route. Today, some 400 families live there, on an area of land just under one square mile in size. The surrounding forests are considered exceptional hunting areas, particularly for whitetail deer, turkey and squirrel.

TEXAS, US

One of the oldest 'cities' in Brazoria County, Texas, Liverpool was settled in 1834 and named by British man Commodore Nelson in memory of his home. Two years later, German pio-

neer Robert Kleberg, his family and their Mexican prisoners landed there by boat having abandoned his home on Galveston Island, on the Texan gulf, due to terrible conditions including a lack of food and alligator attacks. Today, its main employer is the *Equistar Chemicals plant*. At the last count the city had a population of 404.

NEW SOUTH WALES, AUSTRALIA

A suburb of south west Sydney, Liverpool is one of the oldest urban settlements in Australia. Founded in 1810, it was named in honour of Earl of Liverpool Robert Banks Jenkinson, Secretary of State for the Colonies and later a British prime minister. An agricultural centre until the 1950s, it has now been drawn into Sydney's sprawl.

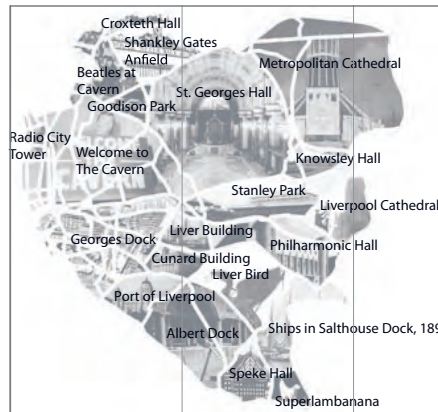
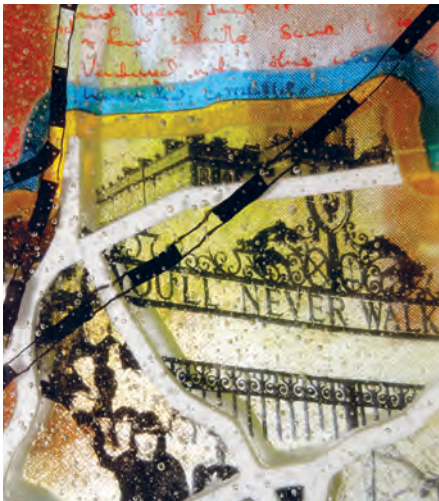
TWIN CITIES

Since the 1950s, Liverpool has been proactive in forging links with cities all over the world in the form of twinnings and friendship agreements – European twinning arrangements were encouraged by the British government as part of the peace process after the Second World War. Although they're put in place by local authorities, the relationships also involve local people through artist exchanges, school link - ups and community projects.

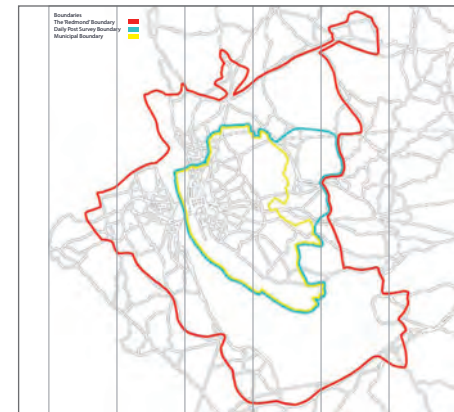
Liverpool's twin cities are Cologne, Germany (1952); Dublin, Ireland (1997); Shanghai, China (1999) and Rio de Janeiro, Brazil (2003). The city also has friendship links with Havana, Cuba; New Orleans, US; Halifax, Canada; La Plata, Argentina; Memphis, US; Minamitame - Cho, Japan; Ponsacco, Italy; Ramnicu Valcea, Romania; and Valparaiso, Chile.



SHIFTING BOUNDARIES



From its early 20th century heyday to post - WWII decline, Liverpool has changed as dramatically in the last 50 years as it grew in the previous century. But this is a proud city of passionate people, whose identity as 'Liverpudlians' extends beyond the geographic, to the emotional ties that bind us and stretch the city's physical boundaries.





LAYER 5:

Between around 1700 and 1801, Liverpool's population grew from 5,000 to 80,000 - mostly due to immigration. As the second city of the British Empire, it attracted those looking for work either at sea or in industries connected to the port, such as sail making or shipbuilding.

During the following century, the influx continued, with many people who had intended to pass through Liverpool to the New World settling in the city, either out of choice or because they simply ran out of money. At the height of the Irish potato famine in the 1840s for instance, around 580,000 people passed through the port, many of whom stayed to grow the city to more nearly 80,000 inhabitants.

LIVERPOOL SPREADS OUTWARDS

The 1801 census shows an average of 6.6 people living in a single dwelling, but in the worst places – usually close to the docks – it was even more than that, often with whole families living in dank, unhygienic cellars. Two or three families would share two bedrooms, a living room and a cellar in a common type of housing, known as court housing, constructed from the early 1700s to shelter the city's increasing population. A number of small houses were built around unsanitary courtyards, which held an open cess pool and a privy. Sickness was common and mortality rates high.

At the time the city was still relatively compact, and overcrowding was common. Areas such as Woolton and Wa-

vertree had not yet been swept up in the urban sprawl. With the appointment of the nation's first Medical Officer for Health in 1848, Dr William Henry Duncan, Liverpool led the way in improving living conditions for its poorest residents. A programme of severe slum clearance was begun and, in the 1860's the city built the country's first council houses.

Liverpool's population peaked in 1931, at more than 855,000 people (compared to today's 445,000). Although there had been some improvement in housing conditions, there was still overcrowding and something more drastic had to be done and the decision was made that would change Liverpool's geography forever, expanding

its boundaries and therefore its shape on the map. The council would construct satellite housing estates on the outskirts of the city and move those living in the more unfit areas to their new homes en masse.

These estates included Cantril Farm (now called Stockbridge Village), Speke, Netherley and Croxteth as well as Kirkby, Huyton and Halewood (now in the metropolitan borough of Knowsley) and Skelmersdale (West Lancashire). While their residents may no longer live in the city centre, or in some cases even within Liverpool City Council's designated area, many maintain a strong allegiance to Liverpool and consider being Liverpudlian as a key element of their own identity.

LAYER 7:

ALBERT DOCK

Designed by Jesse Hartley, the Albert Dock is Britain's largest group of Grade I listed buildings. Officially opened by Prince Albert on 30 July, 1846, it was the country's first structure built entirely of cast iron, brick and stone – preventing the common problem of fire in wooden warehouses. As sailing ships declined, the dock fell out of use and was closed in 1972. Symbolic of Liverpool's degradation, in 1984 the first phase of its redevelopment was opened in time for the arrival of the Tall Ships Race.

THE CAVERN

Thousands of Beatles fans visit Mathew Street every year to pay tribute to the underground club that set

the group on the path to fame. It was opened on January 16, 1957, by Alan Sytner who named it after the Paris jazz club, Le Caveau De La Huchette. It was the Mersey Beat explosion that put The Cavern on the map however. The Beatles played their first gig there on February 9, 1961, with the line-up of John Lennon, Paul McCartney, George Harrison and Stuart Sutcliffe with Pete Best on drums. The current Cavern is located next door to the original cellar, which was filled with rubble during British Rail's creation of an underground network.

CROXTETH HALL

Once a great country estate stretching for hundreds of miles, Croxteth Park has a 900 year-old history. The

original hall was built c.1575 by the Molyneux family and was expanded to show a mixture of Tudor, Georgian and Queen Anne styles. It remained their ancestral seat until the death of Hugh William Osbert Molyneux, the 7th and last Earl Sefton, in 1972; he bequeathed it to the city of Liverpool.

CUNARD BUILDING

Built in 1914-17 as the headquarters and main passenger terminal for the Cunard Steamship Company, the Cunard Building contained offices and ship designing facilities on its upper floors, while the lower floors provided passenger waiting rooms and luggage storage for passengers and Cunard employees. Although Cunard relocated to Southampton in the 1960s, the

THE SIGHTS THAT SAY ‘LIVERPOOL’

building remains one of Liverpool’s most famous landmarks.

GEORGES DOCK VENTILATION

TOWER

This fine example of art deco architecture has a practical use; it provides the ventilation for the Kingsway tunnel under the River Mersey. Designed by Herbert J Rowse in the 1930s’, it was rebuilt by the architect in the 1950’s after war damage. The tower is decorated by sculptures created by Edmund S Thompson – a figure wearing a helmet and goggles symbolises speed, and black basalt statues of Night and Day.

GOODISON PARK

Everton Football Club’s first game

at Goodison Park was on September 2, 1892 – they beat Bolton 4-2. The ground’s original incarnation cost £3,000 to lay out and build stands to three sides of the pitch. In the century since, stands have been rebuilt and standing terraces have been adapted to seating-only. Renovated, refurbished, relocated – Goodison Park remains one of the city’s most loved icons.

KNOWSLEY HALL

The earliest part of Merseyside’s only stately home dates from around 1500, with a Georgian façade and Jacobean, Baroque and Victorian interiors. Originally a medieval hunting lodge, it was owned by the first Earl of Derby, Lord Thomas Stanley.

Since 1994, it has been owned by the present Lord and Lady Derby, who have made it their life’s work to restore the hall to its former glory.

LIVER BIRD

Legend has it that if the liver birds fly away, Liverpool will fall. What a sight that would be – hundreds of them taking off from their perches all over the city. They are on football clubs, schools, weather vanes, universities, cathedrals, rubbish bins and door - knockers. The best known examples perch on the roof of the Liver Building, designed by German wood-carver and sculptor Carl Bernard Bartels. In fact, they date back centuries – believed to be a combination of the seal on King John’s letter patent and a cormorant.

LIVER BUILDING

For many the sight of the Liver Building, viewed from the deck of a ship, was a symbol of home. Designed by Tranmere, born Walter Aubrey Thomas, for the Royal Liver assurance company, it opened on July 19, 1911. One of the world's first concreteframed buildings, it is best known for the two liver birds that perch on its roof. Their designer, Carl Bernard Bartels, was interned in the Knockaloe prison camp on the Isle of Man during World War I in a wave of anti - German sentiment.

LIVERPOOL CATHEDRAL

Constructed in sandstone between 1904 and 1978, to the designs of Sir Giles Gilbert Scott, Liverpool Cathedral is the largest in the UK (in square metres), and the fifth biggest in the world. Its original design was revised in 1910, creating a single central tow-

er flanked by twin transepts. From the top, you can see North Wales, Blackpool and Cheshire.

METROPOLITAN CATHEDRAL

Visible from most parts of the city, the unusual design of the Catholic cathedral makes it an architectural icon. Its tapering lantern tower is surmounted by 16 pinnacles, encircled by a lattice-work crown inset with coloured glass, creating a kaleidoscopic effect. The Metropolitan Cathedral was designed by Frederick Gibberd and built above an existing crypt – the only section of Edwin Lutyens's earlier and more extravagant design for the building to have been completed.

PHILHARMONIC HALL

Herbert Rowse's beautiful art deco concert hall was opened on 19 June 1939, followed by a concert the next

day in which Sir Thomas Beecham conducted a programme of music by Elgar, Weber, Handel, Tchaikovsky, Beethoven and Grieg. Constructed on the site of the Liverpool Philharmonic Orchestra's original home, destroyed by fire in 1933, it includes features said to have been based on decoration in Tutankhamen's tomb.

PORT OF LIVERPOOL BUILDING

Completed in 1907 as the head office of the Mersey Docks and Harbour Board, the Port of Liverpool Building was the first of the Pier Head's Three Graces (the Liver and Cunard buildings complete the set). Created in Edwardian Baroque style, it is decorated by 3m-high classically draped female figures, representing Commerce and Industry, which were created by sculptor Charles John Allen.

RADIO CITY TOWER

The 138m-tall tower was built as a ventilation shaft for St John's Market, with a revolving restaurant and observation platform at its top. The restaurant closed in 1977 and apart from a brief period, the tower remained shut until refurbishment in 1999. It re-opened the following year as the headquarters for Radio City.

SALTHOUSE DOCK

Designed by Thomas Steers and completed after his death by Henry Berry, Salthouse Dock opened in 1753 as an important transit terminal for the salt industry. Vessels would be unloaded at the Albert Dock and moved on to Salthouse Dock for loading.

SHANKLY GATES

Unveiled outside Anfield Stadium on August 26, 1982, the gates pay trib-

ute to Bill Shankly, the straight-talking Glaswegian who was Liverpool Football Club's manager from 1959 - 1973. They are topped with the words You'll Never Walk Alone, the song from the musical Carousel, which became LFC's anthem.

SPEKE HALL

This rare Tudor timber-framed manor house was built by the Norrises, a family of devout Catholics. In the 18th and 19th centuries it fell into decay, even being used as a cow shed at some point, but was restored during Victorian times. It is now owned by the National Trust.

STANLEY PARK

Now marking the dividing line between Everton and Liverpool football clubs, Stanley Park was designed by Edward Kemp and opened in 1870.

Boasting a grand terrace with expansive bedding schemes once adorned by fountains, it features the 1899 Gladstone Conservatory, which was recently restored and re-opened.

SUPERLAMBANANA!

Half - banana, half - lamb, Japanese sculptor Taro Chiezo's creation drew mostly negative reactions when it was unveiled back in 1998. Many thought it would clash with its backdrop - too abstract for Liverpool's fine Victorian architecture and too vibrant and quirky for the drab 60s office blocks. But it grew on people and, in 2008, we celebrated its idiosyncrasy with Go! Superlambananas, a public art project that saw 124 specially decorated 2m - high versions of the sculpture placed on streets across the city.

LAYERS 7 AND 8:

Which places would you include or leave out of a definitive map of Liverpool? From November 2007 to February 2008, Liverpool Daily Post readers were given the chance to answer just that question. The full list of nominated locations was put to the vote, with the resulting boundary line, forming layer seven in the completed artwork. Here are some readers' suggestions alongside those of some famous names.

AL WILLS, DAILY POST READER

'Wirral has never embraced Merseyside as ours; we were undemocratically dumped in it by bureaucrats who didn't realise the Mersey was a much wider boundary river than it appeared on the map. The attempt to create a

cross-river Parliamentary seat with Wallasey and Everton illustrated the strength of opposition against Wirral merging with Liverpool, a view shared on both sides of the Mersey.'

GEORGE PRINGLE, DAILY POST READER

'I'm not writing to you concerning a town inclusion in your Liverpool Map project but to ensure my town of Bootle is not included. Though our town borders on the edge of Liverpool, we have always regarded ourselves as Bootleans and not Scousers.'

LORD DERBY

'I'm certain that Knowsley Hall should be on your map. It is the Liverpool area's only stately home – the

hall and family have always been inextricably linked to Liverpool's history. Many Liverpool charities raise funds through dinners or balls here, and Knowsley Safari Park is the biggest paying tourist attraction in the Liverpool area. Need I go on?'

JAMES SAMPLES, DAILY POST READER

'I live in Halewood in the phoney borough of Knowsley. Most (90%) of the inhabitants are Scousers. We shop, are entertained, we support football clubs... and call Liverpool our town centre.'

TREVOR SKEMPTON, DAILY POST READER

'I lived in Chester and Ellesmere Port

SETTING THE BOUNDARIES

as a child, went to school in Birkenhead, studied and worked in Liverpool city centre and have lived in North Wales. In my opinion it is all Greater Liverpool.'

OLYMPIC MEDALLIST STEVE PARRY LEARNED TO SWIM IN SOUTH LIVERPOOL

'I would definitely like to see Allerton on the map. I don't think people from South Liverpool see themselves as any less Scouse than our friends in the North. Whenever you drive through Allerton, you see children and young people playing football, basketball, cricket – and this is important in such a sporty city. It is also very picturesque and offers people a bit of greenery, compared to the city centre.'

MARC ALMOND, SOUTHPORT-BORN MEMBER OF 80S POP DUO SOFT CELL

'Of course Southport is a town in its own right, with its own unique identity, much more than just a Liverpool suburb by the sea. Yet it remains an integral part of Merseyside and holds onto a strong connection to Liverpool. As a teenager, I went to Liverpool almost every week, taking the short train journey back and forth to see concerts by the stars of the time, or even just to walk around and feel like I'm part of a big city. Liverpudlians have always visited Southport, to spend a day by the sea, even though it rarely comes in.'

CHERIE BOOTH QC, WHO GREW UP IN CROSBY

'I wish to nominate Waterloo to be included. It's a great community in the heart of Merseyside, halfway between Liverpool and Southport. It is in a beautiful spot, facing the sea. I have very many happy memories of growing up there, it is very special and definitely part of Liverpool as a city.'





PEOPLE'S CITY

Liverpool's distinctive personality – cosmopolitan, community – oriented, passionate and proud – is as much the result of its people, drawn in and out on the Mersey tide, as its physical make - up.



LAYER 9:

It was to Italy that Liverpool's designers and architects had looked before the dawn of the 20th century, comparing Exchange Flags behind the Town Hall (since replaced) to Ven-

ies across the Atlantic with much in common with Liverpool.

Although it may not seem so today, when our tallest buildings are recent-

ly constructed towers that threaten to dwarf the 100 - year-old buildings but, like American cities, Liverpool was built tall. When it was being constructed in 1908-11, the press described the Liver Building as a skyscraper. Eight storeys high, with the top of

its clock towers standing 90m above the ground, it was the tallest building of its date. Its concrete frame was reinforced with steel in a style that was later used for many New York sky-



LIVERPOOL, NEW YORK OF EUROPE

scrapers - inspiration crossed the Atlantic in both directions.

Classicism, favoured by many US architects, influenced those designing buildings in Liverpool. The Cunard, for example, which housed the shipping line's headquarters and from where thousands of passengers would board liners bound for New York, has a palazzo shape favoured by companies such as Mead and White, which designed the Manhattan Municipal Building and Washington Arch in Greenwich Village.

Liverpool's cosmopolitan feel stretched beyond its physical appearance, deep into its culture. With so many cruise companies operating

ships out of Liverpool - among them Anchor, Bibby, Cunard, Canadian Pacific, Elder Dempster and Pacific Steam Navigation - American cultural influences reached the city long before it began infiltrating the rest of Europe. It began with the pre-war steamships, adorned with country house style of wood panelling and brass fittings, which were replaced after the Second World War with flashier, bigger and faster vessels, some of which were built at Cammell Laird shipyard in Birkenhead such as Cunard's 1939 art deco Mauretania. Although jazz music and blues travelled across the Atlantic from the 1920s onwards, it was the 'Cunard Yanks' of the 1950s who are credited for Liverpool's cultural revolution, bringing pop music and fash-

ion from New York back home where it inspired the foundations of Merseybeat. From the mid-1940s to the end of the 1960s, thousands of ordinary Liverpool men worked their way across the Atlantic and back as chefs, stewards, kitchen porters, waiters and pantry men. Inspired by the vibrant city that was so unlike the grey post-war Britain they had left behind, they brought back little pieces of this new exciting world. They returned with everything from the first movie cameras to denim jeans to sharp suits and, most significantly, electric guitars and records by musicians such as Frank Sinatra and Nat King Cole - music that would influence the Merseybeat revolution and ultimately lead to the creation of The Beatles.

LAYER 10:

Merseyside played a prominent part in the Second World War - its munitions factories churned out supplies, the Battle of the Atlantic was masterminded from an underground bunker near



Liverpool Town Hall - and suffered great losses, both in terms of lives and buildings at home during the Blitz and its servicemen fighting abroad. As ra-

tioning finally came to an end in 1954 and Harold Macmillan was observing 'you've never had it so good', the people of Liverpool were still working to rebuild their lives and their city.

Despite the British Empire being broken up, heralding an end to the city's international maritime importance, its docks continued to boom. The Pacific Steam Navigation Co's ships travelled from Liverpool to the Caribbean,

through the Panama Canal and along eastern South America, while Booth Line sailed 1,000 miles up the Amazon and Blue Star Line operated refriger-

ated ships carrying meat from its vast Argentinian ranch interests. Until 1957, the dock workers travelled along the Dock Road on the Liverpool Overhead Railway, which was as much a part of the city's skyline as the Three Graces.

Responding to shipowners' demand for larger vessels, the Mersey Docks & Harbour Company began building larger docks, and so the city's docklands moved northwards to the river mouth and deeper waters. Meanwhile, passenger ships, ocean liners and ferries moored at Liverpool Landing Stage, the world's largest floating structure at a quarter of a mile long.

But the boomtime wasn't to last and, as passengers began buying airline

LIVERPOOL AFTER THE WAR

tickets rather than cruises and containerisation took over from traditional cargo ships, Liverpool took a hit. Its residents could no longer rely on the River Mersey, which had been at the centre of their lives for generations, for work.

Other industries also suffered as Liverpool's fortunes hit an all time low. During the 1970s, more than 92,000 redundancies were declared on Merseyside across all industries. In 1978, the British Leyland TR7 sports car plant was closed with the loss of 3,000 jobs; in 1979, Dunlop closed its tyre factory in Speke when an appeal for £50m from the Government was turned down; the Meccano factory on Binns Road closed down the same

year and, in 1980, it was followed by the Tate & Lyle refinery in Kirkdale.

With such devastating levels of unemployment came social unrest. In July 1981, police arrested 20 - year - old Leroy Cooper on police assault charges after he intervened when police followed a young motorcyclist into the Toxteth area. A crowd gathered and in the fracas that followed three police officers were injured. This was the touch paper that sparked the nine - day Toxteth Riots during which nearly 1,000 police officers were injured, 500 arrests were made, 70 buildings were destroyed by fire, there was massive looting and, for the first time in mainland Britain, police had fired CS gas canisters in an attempt to disperse the crowds.

After the trouble died down, the government appointed Lord Scarman to conduct an inquiry into the causes of the 1981 troubles in Britain's black communities and national and local authorities began tackling the complex political, social and economic factors that he concluded had created a 'disposition towards violent protest'. This included the appointment, by Prime Minister Margaret Thatcher, of environment minister Michael Heseltine as minister for Merseyside. He played a major part in the regeneration and rehabilitation of Liverpool, including the restoration of the Albert Dock and the creation of the Garden Festival at Otterspool in 1984, which was restored as a public park in 2012.

LAYER II:



Ironically, it was inside the building of a former lunatic asylum that Liverpool's first university was born. University College, as it was then known,

was situated behind what later became the University of Liverpool's striking red brick Victoria Building (now the Victoria Gallery and Museum) on Brownlow Hill.

Established by principal founding fathers James Campbell Brown, Charles Beard and William Rath-

bone, it did not originally have the power to confer its own degrees which were awarded by Manchester's Victoria University until 1903, when it was granted its own charter .

Merchants, rich from profits made through the nearby port, valued learning as highly as they did success in business and were keen to financially support the new university. The following 100 years saw new buildings spring up around Brownlow Hill as the institution expanded. In 1904, a veterinary college relocated from Edinburgh to Liverpool and the faculty of engineering gained the Harrison Hughes Laboratories. Two months before the outbreak of World War I, a new arts building was completed.

The two world wars took their toll on the University of Liverpool, both in terms of lives lost and funding for expansion and salaries. However, again generous benefactors stepped in to

LEARNING IN LIVERPOOL

support the institution. Among them were prominent university officer and ship owner C. Sydney Jones, who donated property in Abercromby Square to be used as the department of education; Sir T Harrison Hughes, who gave £25,000 for the purchase of an athletic field to commemorate his brother, Geoffrey Hughes; and Harold L. Cohen, who presented the university with its largest gift - £100,000 for a new library - he died on the day the foundation stone was due to be laid.

Today, there are 27,000 students at the University of Liverpool studying more than 400 programmes in 54 subject areas. In 1903, there were just 638. The institution's most recent expansion takes it far outside the Liv-

erpool city area to China, where the Xi'an Jiaotong-Liverpool University welcomed its first students in 2006 and aims to be educating 10,000 students every year by 2015.

Liverpool John Moores University's origins date back even further - to 1825, when a small mechanics institution was founded. Over the following decades, this merged with other organisations to eventually become Liverpool Polytechnic, which was renamed Liverpool John Moores University in 1992 when it was transformed into one of the UK's new generation universities. Named after the founder of the Littlewoods empire, the institution aims to provide paths into education for people of all ages and backgrounds and

teaches more than 24,000 students from all over the world.

Liverpool Hope University also has a long history, made up of founding colleges the Church of England's Warrington Training College, or St Katharine's, established in 1844, and the Sisters of Notre Dame's Our Lady's Training College, opened in 1856, which both trained women to become teachers. In 1965, Christ's College was built on the site now known as Hope Park, in Childwall.

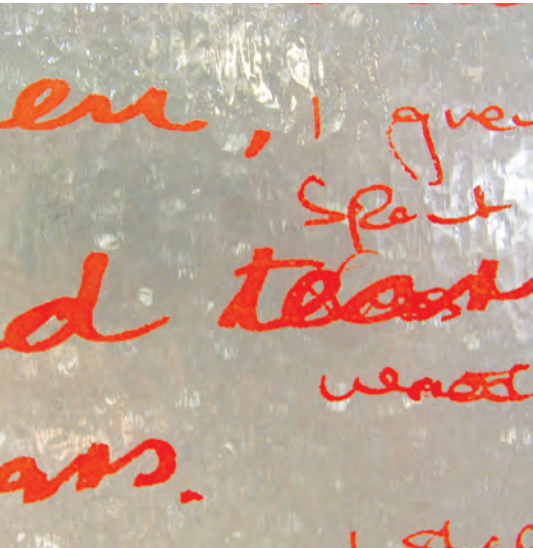
By 1980, the three colleges were joined as an ecumenical federation and later became a single institution, renamed Liverpool Hope. It was made a university in 2005.



800 different stories.
800 different songs.
800 different cultures
800 different tongues



LAYER 12: COMMUNITY



When BBC Radio Merseyside announced it was compiling an 800-line poem to mark Liverpool's 800th birthday in 2007 the response was staggering. More than 3,000 lines were submitted by the station's listeners - some humorous, some sad, but all of them a heartfelt expression of their beloved home.

Roger McGough wrote a pair of verses that would bookend the Liverpool Saga, while local poets Sylvia Hikins and Dave Ward whittled down the

500 - plus individual submissions to fit the 792 - line space in between.

The finished piece covered a vast range of subjects including the River Mersey, factories, sport, families, disasters and music across the 800 years of Liverpool's history. Open Culture and Radio Merseyside held

sessions for local people to copy out lines of the saga in their own handwriting, which would later form the community layer of the Liverpool Map.

FROM THE FIRST TENTATIVE SCRATCH OF THE PEN TO THE KEYBOARD'S FINAL BREATHLESS AMEN, ONE POEM. A PATCHWORK OF LAUGHTER AND TEARS. EIGHT HUNDRED LINES. EIGHT HUNDRED YEARS.

LIVERPOOL SAGA. 2007





CULTURE

The lifeblood of the city, Liverpool has always prided itself on its cultural capital, from Beat poet Alan Ginsberg's 'centre of the human consciousness' to European Capital of Culture 2008. Invited to vote throughout 2007, Daily Post readers decided these are the musicians, artists, sports stars and people who've stood up and spoken out for the city ...



LAYER 13:

STEVEN GERRARD

The Whiston-born footballer has so far spent his entire career playing for Liverpool FC, making his debut in 1998. He became captain in 2003, and has made more than 400 Premier League appearances. In 2001, he scored his first international goal in England's 5-1 victory over Germany.

Regarded by many as one of the greatest English midfielders in history, in 2005 he came third in the voting for the prestigious Ballon d'Or award, which is given to the best player in Europe. The highlight of his career to date is lifting the European Cup as club captain following Liverpool's dramatic triumph over AC Milan in Istanbul in 2005.

DIXIE DEAN

Fondly remembered by Everton fans to this day, William Ralph 'Dixie' Dean was signed from Tranmere Rovers for £3,000 in 1925. He scored 32 league goals in his first full season at Goodison and, in 1928, set an individual record of 60 league goals in a single season. Under his captaincy in the 1930s, Everton won the Second Division, First Division and FA Cup. Born in Birkenhead in 1907, he practised football as a boy by throwing a ball on to the roof of his local chapel and heading it as it bounced off. A statue of Dean was unveiled outside Goodison Park in May 2001.

WAYNE ROONEY

England's youngest ever goal scorer,

the Croxteth-born striker joined Everton at the age of nine, making his debut with the professional team in 2002. Five days before his 17th birthday, he scored his first Premier League goal – a 25-yard strike against Arsenal at Goodison. Despite being an Everton fan since he was a boy, Rooney spent just two seasons with the club before signing with Manchester United for £25.6m in 2004.

JOHN CONTEH

Such was the Kirby-born boxer's talent that he was once touted as a possible contender for Muhammed Ali. Conteh began boxing at the age of 10, winning the middleweight gold medal at the British Commonwealth Games in 1970 and the World Boxing Coun-

LIFEBLOOD – SPORTING PASSIONS

cil's light heavyweight crown in 1974, a title he held until 1977. He retired from the sport in 1980 and is now an after dinner speaker.

KENNY DALGLISH

Born in Dalmarnock, East Glasgow, Dalglish signed to Liverpool FC from Celtic in 1977, where he was a prolific goal scorer during one of the club's most successful periods, winning seven league titles, three European Cups and five domestic cups. Nicknamed 'King Kenny', he became player - manager of Liverpool in 1985, winning three league titles and two FA Cups before resigning as manager in 1991. His support for Liverpool FC fans went beyond the pitch and in the aftermath of the Hills-

borough disaster in 1989, in which 96 LFC supporters lost their lives, he attended many of their funerals. Following Liverpool manager Rafael Benitez's departure from the club and its subsequent lack of success under Roy Hodgson, Dalglish began his second stint in charge as caretaker manager in January 2011; he signed a three - year contract in May 2011, but despite winning the League Cup in February 2012 he left the club for the second time in May the same year after 'disappointing' league results.

JAMIE CARRAGHER

One of Liverpool FC's longest-serving players, Bootle-born Carragher began playing football for Merton Villa in the under - 11s Bootle and Lither-

land District League before joining the club's youth team at the age of 16. He made his professional debut with Liverpool during the 1996 - 97 season, winning a treble of the FA, League and UEFA Cups in 2001. In May 2011, he moved up to second on LFC's all - time appearance list with 666 appearances, beaten only by Ian Callaghan (857 games). In February 2013 he announced he would retire at the end of the season.

In 2009, he set up the 23 Foundation to help Merseyside children achieve their dreams, and has received the Freedom of Sefton for his charity work.

LAYER 14:

ELVIS COSTELLO

The Grammy Award - winning singer - songwriter behind such hits as Alison, Shipbuilding and Oliver's Army was born in London but moved to Birkenhead as a teenager in 1971. His



band Elvis Costello & the Attractions was inducted into the Rock and Roll Hall of Fame in 2003.

TEARDROP EXPLODES

Credited with heralding the return of

psychedelia to mainstream 80s rock and pop music, Teardrop Explodes was formed in 1978 with a line - up including frontman Julian Cope, Paul Simpson and (later to become) leading British artist Ged Quinn. They split in 1983 but were awarded an Inspiration Award by music magazine Mojo in 2010 after the re - release of albums Kilimanjaro and Wilder.

BILLY FURY

Dingle - born Ronald Wycherley, aka sixties pop star Billy Fury, may never have had a number one single but he did spend more than 300 weeks in the UK charts. Known as 'the British Elvis', his hits included Jealousy, Last Night Was Made for Love and his signature tune, Halfway to Paradise. He

died in 1983 due to weakened heart valves from rheumatic fever he suffered as a child.

THE BEATLES

Surely John Lennon, Paul McCartney, George Harrison and Ringo Starr need no introduction? Beatlemania exploded in the late 1960s - cue crowds of screaming female fans, 20 number ones, seven Grammys, 15 Ivor Novello Awards and Lennon claiming to be 'more popular than Jesus' - but for many they will remain just four lads from Liverpool who changed music forever.

FRANKIE GOES TO HOLLYWOOD

Emerging from the 70s punk scene, the dance - pop band was formed in

LIFEBLOOD – MUSICAL HEROES

1980 by lead singer Holly Johnson. In 1984, their top 40 hit single Relax was banned from the BBC for its overtly sexual nature; it flew to the top of the UK charts and stayed there for five weeks. Later singles Two Tribes and The Power of Love also reached number one, making Frankie Goes to Hollywood the second band to top the charts with its first three releases. Liverpool's Gerry and the Pacemakers was the first.

PETE WYLIE

Best known as leader of post - punk band The Mighty Wah!, which gained critical acclaim in the early - 80s, their biggest hit The Story of the Blues reached number three in 1982. Wylie now pursues a solo career and

has written the soundtracks for films including Alex Cox's I'm a Juvenile Delinquent and Under The Mud.

BRIAN EPSTEIN

The man who discovered The Beatles also managed Gerry and The Pacemakers, Billy J Kramer and The Dakotas and Cilla Black as well as running his family's business, North End Music Stores. Sadly, a combination of work pressure, recreational drug use and depression, possibly linked to his homosexuality (then illegal), took its toll and Epstein died of an overdose in 1967 at the age of 32.

ECHO AND THE BUNNYMEN

Formed in 1978 by Ian McCulloch, Will Sergeant and Les Pattinson, Echo

and the Bunnymen won critical acclaim with their first album Crocodile (with drummer Pete de Freitas). Despite De Freitas's death in a motorbike accident in 1989 and the temporary loss of charismatic lead singer McCulloch to a solo career the year before, the band has continued in various line - ups ever since.

THE LIGHTNING SEEDS

Formed by Ian Broudie in 1989, festival favourites The Lightning Seeds have had 12 top 20 UK hits including Pure, Sugar Coated Iceberg and Change. Three Lions, a collaboration with comedians David Baddiel and Frank Skinner, was the official anthem of the England team for the 1996 European Championships.

LAYER 15:

JOHN PEEL

The Heswall-born DJ and Liverpool FC fan championed countless musicians over his 40-year career, including David Bowie, Marc Bolan, The Smiths and the White Stripes. In Merseyside, Echo and The Bunnymen, Pete Dinklage, The Teardrop Explodes, Half Man Half Biscuit and The La's all say they were inspired and supported by the father-of-four. When Beatlemania hit the States, Peel was working as a DJ in Dallas, Texas, where he was able to take advantage of his Liverpool connections. On returning to England in 1967, he joined the pirate station Radio London before transferring to Radio 1 where he remained as its last original presenter until his death, aged 65, in 2004.

PAUL O'GRADY

Birkenhead-born Paul O'Grady shot to fame as the flamboyant, mini-skirted character Lily Savage before reinventing himself as a TV chat show host. The youngest of three children, he grew up in Tranmere, attending St Anselm's College, Manor Hill. While living in London in 1978 he developed his drag act, based on some of the women in his family, and took it to the Edinburgh Festival where he won a Perrier Award. Savage won spots on This Morning and The Big Breakfast before presenting game show Blankety Blank. O'Grady has won a Bafta Award for his chat show, also named most popular daytime programme at the National Television Awards, and was given an MBE in 2008.

PHIL REDMOND

Best known as the creator of three of Britain's longest-running drama programmes, Grange Hill, Brookside and Hollyoaks, Phil Redmond has also written extensively for radio, television and stage. He served on Liverpool's Capital of Culture Board from November 2006, becoming creative director in September 2007, and is credited with turning plans for the year around after a catalogue of disasters. He is chair of National Museums Liverpool.

ARCHBISHOP DEREK WARLOCK

Appointed Archbishop of Liverpool in 1976, the prelate worked closely with Anglican Bishop David Sheppard to foster unity and harmony in Liver-

LIFEBLOOD – OUR PEOPLE

pool in the wake of the Toxteth riots. He welcomed Pope John Paul II to the Metropolitan Cathedral in 1982 and played an important part in consoling the public in the aftermath of the Heysel and Hillsborough football stadium tragedies. He and Bishop Sheppard were awarded the Freedom of the City of Liverpool in January 1994 and the Archbishop was made Companion of Honour in the 1996 New Year Honours; he died of cancer two days after his 76th birthday, a week before he was due to collect the award.

BISHOP DAVID SHEPPARD

Bishop of Liverpool from 1975 - 1997, Lord Sheppard was an international cricketer who captained England

before turning away from his sporting career to dedicate his life to the church. Converted to evangelical Christianity whilst at Cambridge University, he was ordained in 1955 but continued to play test cricket until 1963. While working with Archbishop Warlock to reconcile Liverpool after the 1981 riots and promote the city's regeneration, he was an outspoken critic of Conservative prime minister Margaret Thatcher. He was made a life peer in 1998. On his death from cancer in 2005, more than 2,000 people gathered to pay their respects.

BESSIE BRADDOCK

Although it was not until the age of 46 that she became Labour MP for Liverpool Exchange, Bessie Braddock

served a long apprenticeship in politics. As a child she ran errands for her socialist parents – distributing handbills, counting voters at polling booths and making tea for canvassers. Her ardent political beliefs attracted her to her husband and partner John Braddock, a socialist wagon repainter on the Cheshire Lines railway, who would later become twice leader of Liverpool City Council. “Battling Bessie” was famous for her fiery speeches and battles for the underdog, once pulling out a pair of air guns in the House of Commons and placing them in front of the Home Secretary to make the point that guns should not be sold without a licence. She died in 1970, seven years after her husband.

LAYER 16:

JIMMY MCGOVERN

Powerful social issues drive screen-writer Jimmy McGovern's dramas, which include the acclaimed 90s series *Cracker*, starring Robbie Coltrane as alcoholic criminal psychologist Fitz. Jimmy McGovern's career began on Liverpool-based soap *Brookside*; his creations include *The Lakes*, *The Street*, *Priest* and *Hillsborough*.

ROGER MCGOUGH, BRIAN PATTEN AND ADRIAN HENRI

Known collectively as the Liverpool Poets, the trio performed their work in the *Everyman Bistro* during the 1960s. They published a joint anthology, *The Mersey Sound*, in 1967, which sold more than 500,000 copies. Born in Birkenhead, Adrian Henri was an

acclaimed painter as well as a poet; he died in 2000 after a long illness. Litherland-born Roger McGough was also a member of anarchic group *The Scaffold*, with John Gorman and Mike McGear (Mike McCartney), reaching number one in the UK singles chart in 1968 with *Lily The Pink*. He was made Poetry Society president in December 2011. Brian Pattern grew up in *Wavertree*, meeting McGough and Henri while writing an article about them for the *Bootle Times*. He writes extensively for both children and adults.

KEN DODD

Liverpool's most famous comedian played his first gigs at an orphanage in *Knotty Ash*. His first professional booking came at Nottingham's *Em-*

pire Theatre in 1954 and he continues to perform his notoriously long stand-up shows into his 80s. Alongside comedy success, Dodd had 19 top 40 hits including *Tears* – number one for five weeks in 1965, which sold more than a million copies.

WILLY RUSSELL

The award-winning writer of *Blood Brothers*, *Educating Rita* and *Shirley Valentine*'s big break came in 1974 when the Liverpool *Everyman* production of his musical *John, Paul, George, Ringo and... Bert* was taken to the West End. His plays have been produced all over the world as well as being made into films. His novel *The Wrong Boy* has been translated into 15 languages.

LIFEBLOOD – ARTISTIC INSPIRATION

ALAN BLEASDALE

The TV dramatist started his career writing radio dramas; Scully, about a football mad teenager, was later made into a television series. Among his best-known work is Boys From the Black Stuff, about unemployment in 80s Liverpool, and G.B.H. about Militant Labour councillors. In 2011, his two-part film The Sinking of the Locomotion was shown on BBC2. He and Willy Russell were members of the Gang of Four management at the Liverpool Playhouse theatre in the 1970s, where they premiered much of their writing.

GLENDIA JACKSON

A professional actress before becoming a politician, Glenda Jackson has been Member of Parliament

for Hampstead and Kilburn since 1992. Born in Birkenhead, she attended West Kirby Grammar School for Girls before studying acting at RADA, winning two Best Actress Academy Awards for Women in Love in 1969 and A Touch of Class in 1973.

ARTHUR DOOLEY

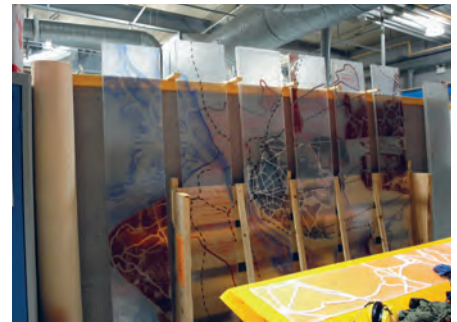
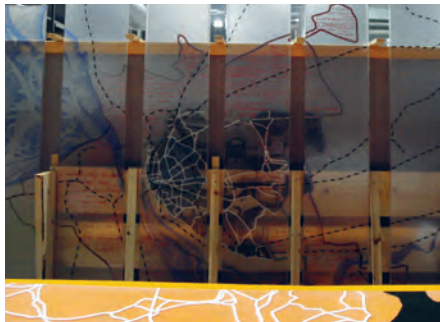
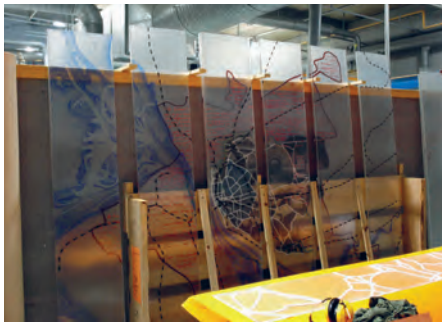
Born in Liverpool in 1929, Dooley sculpted mainly religious works, working in scrap metal and bronze. Prominent pieces include Redemption, created with Ann McTavish, for Liverpool Cathedral; The Resurrection of Christ at Princes Park Methodist Church and his Beatles tribute Four Lads Who Shook the World, on Mathew Street. His studio remains untouched since his death in 1994.

LEONARD ROSSITER

The actor's plans to study at Liverpool University were dashed after his father, a voluntary ambulance man, died during an air raid in 1942 and he was forced to get a job to support his mother. Rossiter's TV roles included the lecherous landlord Rigsby in Rising Damp and the lead in The Fall and Rise of Reginald Perrin. He died in October 1984.

BILL TIDY

The Tranmere-born cartoonist began drawing adverts for the Radio Times. A prolific artist, Tidy drew many of his cartoons for satirical magazine Punch. He has also designed board games, stage sets and trophies and is a popular after-dinner speaker.



THE TECHNICAL FEAT



Looking at the map in its new home, blazing with colour in the window of the Museum of Liverpool, it's hard to comprehend what a technical feat it represents, but everything about its creation is ground-breaking. The sheer size and scope of the glass,

and the firing of so many layers represents something of a coup for the artists, and there are few places in Europe that would have been able to create a glass sculpture of this size. Its firing was the culmination of years of work, of research, of the

painstaking creation of the map's tiny details, and the meticulous piecing together of its curves and contours to create a picture of the city, in 2007, that is mind-blowing not just in its height and width, but in its depth and detail.

PART THREE –

Glass is a wonderful substance, beautiful to behold and fabulous to touch. An oxymoron of sensations as it can be silky and rough; sharp and smooth. It is both a dream and a nightmare. When it is heated it moves of its own accord, when cold it can be tough, protective, twisted into coils, broken and reformed, cut, polished, laminated, toughened, water jet cut, laser cut, screen printed, painted, transparent, milky or opaque.

Many of the techniques have been utilised within and as layers; the whole fused together. At each stage there is an opportunity for disaster. All the materials need to be compatible and should they be at the opposite ends of the given tolerances, problems can oc-

cur usually resulting in cracking. Different colours heat up and cool over varying lengths of time; the thickness of the material increases the propensity to fail; the sheer weight of the glass (100kgs per panel) is a challenge for handling, manipulating, fusing and annealing. This Liverpool Map is therefore a major technical achievement to fuse a 17 - layered artwork, in six separate sections.

Designing and making the panels, utilising UK facilities sends out strong global messages that iconic glass art work is being designed, made and installed in this country. It is a reminder that the UK has the skills and the technical ability to embrace and use new technology in a holistic manner.



TECHNICAL ACHIEVEMENTS

My first impression was of one large glass map, silhouetted against the Liver birds on the top of the Liver Building. Moving closer, the large individual panels are skilfully angled to give a dappled vista of the waterfront. The size is deceptive because of the height of the windows which allows light to flow and change the depth of colour as you move.

It is a map for the people of Liverpool; the geography is clear, boundaries identify sections whilst making it feel inclusive, the part that water plays in the city, the hand written notes that make you want to learn more of the writer – their age, their experience, their outlook. Even the ‘back’ has faces that you are sure you know.

The work unites two traditional areas of glass making. Made in Sunderland; sited in Lancashire. The two areas have centuries of history, creativity and innovation in glass. It reminds us that the UK glass industry has been through turbulent times, has been at the forefront of industrial philanthropy, has managed, generally speaking, for both sides of the management divide to work together, has enabled space exploration, improved cotton manufacture, given us oven ware, laboratory ware, drinking vessels and is still evolving and restructuring using or inventing the most appropriate methods of manufacture. Glass does not have inbuilt obsolescence; it promises new futures and horizons.

A new museum – a new map epitomising man and ‘machine’ in harmony. A spectacular achievement.

Barbara P. Beadman

Assistant to the Court, Worshipful Company of Glass Sellers of London

Director, Plowden & Thompson

MAKING THE MAP:

The *Liverpool Map* was commissioned for the People's Gallery at the new Museum of Liverpool, depicting the city as defined by culture and heritage, rather than geography and politics.

Its technical achievements are as unique as its location: dominating a huge glass window, overlooking the Three Graces and the river Mersey. The sculpture's visible part stands nearly two metres tall and is divided into six slab-shaped columns, each measuring 33cm wide and 5cm thick. Every column is made up of 17 layers of sheet glass, fused into a solid block.

The ideas behind the *Liverpool Map* are ground-breaking: from the desire to physically capture the city's intan-

gibles – emotional boundaries, accent, past, present and future – to the process leading to its creation. Whilst the techniques used aren't new, the combination of cutting edge technology, traditional craftsmanship, innovation and problem-solving – and the sheer scale of this monumental kiln-formed glass sculpture is breathtaking stuff.

The world-class facilities in the National Glass Centre at the University of Sunderland, which houses one of Europe's biggest kilns, inspired the proposal for the *Liverpool Map*. Blending ancient glassmaking techniques with modern machinery, there is perhaps no other place in the UK where such a sculpture could be made.

While the artists were interested in depicting a cultural landscape, the structure of the map is literally a portrait of Merseyside. The artists started their research by compiling a puzzle of Liverpool pictures, poetry, historical landscapes, ephemera and handwriting, scanning them into a computer. Before the sculpture ever existed physically, it began as a map of digital layers. This mass of information was then organised within the boundaries of a digital version of an Ordnance Survey (OS) map of Liverpool, including the Mersey and the city's roads, railways and boundaries.

Contours from the OS map were used to construct the core of the artwork. On *Liverpool Map*, these contours are

TECHNICAL ACHIEVEMENTS

rendered in waterjet cut glass, providing thick, brightly coloured layers deep inside the clear glass columns. They're accurate enough that a viewer can recognise and pick out geographical details – there's the network of streets in dense white glass, the transparent sea blue Mersey coastline, and a bright blue line indicating Liverpool's city limits. Two additional boundaries were added: a boundary line in yellow glass voted on by Daily Post readers, and a line in red, what became known as the 'Redmond Line', showing Phil Redmond's inclusive depiction of Liverpool's emotional border (see pages 54 to 55).

The clear spaces in between the streets and the Mersey were filled

with a collage of images. Local landmarks and cultural icons from the city's archives, the National Museums Liverpool collection and the Daily Post's records were chosen by voters to represent their city, with handwritten text and hand-drawn patterns adding detail. Using the traditional silkscreening process, these images were transferred by hand to large sheets of glass.

A combination of waterjet cut contours and screenprinted images was used to construct a layered 'portrait', providing an accurate depiction of the map of Liverpool as well as a local expression of the many sides to Liverpool's story.



'WEAVING' THE COLUMNS

The visible parts of the *Liverpool Map's* columns are just shy of two metres. Each slab measures 225 cm, with the rest of the glass hidden in the base as a sturdy anchor. But the type of glass used was manufactured only in 205 cm lengths, so additional glass had to be fused to the ends of each column to make the full height. These extra pieces and the 17 layers of glass were woven together in an overlay pattern, to create the strongest bond possible.

RESPONDING TO THE BRIEF:



Open Culture's brief called for a map that conveyed Liverpool's complicated geographical identity, but 'which could embrace local, national and international areas, highlighting Liverpool's global influences'. Votes and contributions were gathered from readers of the *Daily Post*, and given to the artists to interpret.

Reading the brief, artist Inge Panneels said: 'I thought glass would be a beautiful medium to interpret a multi-layered cultural snapshot of Liverpool in 2008. My University of Sunderland colleague Jeffrey Sarmiento's work often consists of many layers of printed glass stacked and fused together, allowing a depth of visual information to be built up. He agreed to put in a joint application. Little did he – or I, for that matter – know what we were letting ourselves in for!'



The artists proposed the creation of a *Liverpool Map* that's more than cartographically correct; it would be constructed from stacks of sheet glass, fused together into a solid block, encapsulating an array of Liverpool's ge-

A PROPOSAL

ography and culture. Beyond the city's physical boundaries, each layer represents local identity through images of cultural icons, people and places, international links and trading routes, past and present.

Familiar geographical features were assembled from coloured glass using delicate, high - precision waterjet cut - outs and intricate screen prints. Layer by layer, these individual details formed a three - dimensional map, dense with images.

At first glance, the *Liverpool Map* has the look of a 'traditional' map. But deeper inspection reveals the many layers within its geography. The responses of the public include emo-

tional memories, natural features, economic topography, demographics, language, history, local imagery and links with other places.

Glass – with its historical association with the city through St Helens' glassworks – is a fitting material, and proved the ideal medium to integrate complex information into a single artwork. As daylight shines through, you can see subtle changes in colour over the course of a day. It makes the *Liverpool Map* far more dynamic than a traditional opaque sculpture, while also doing justice to the museum's huge window, in front of which the map stands.

FROM THE BLOG

25 SEPTEMBER 2008

So, off we go to Liverpool to be interviewed. We go with the idea that it's an honour to get to this stage, whatever happens. We use the train journey to brief ourselves and prepare for the interview, and arrive armed with a PowerPoint presentation and a glass sample and 3D rendering.

Called for interview, we're nervous but excited. It's clear that we each bring different expertise to this project. The interview panel consists of members from NML, Open Culture, the *Daily Post* and Phil and Alexis Redmond, who are sponsoring the project.

Clearly we impressed them, as on Friday I receive a phone call from George, from NML, to say we've won the contract and ask would we like to make the Liverpool Map!

I call Jeff – we're both a bit gobsmacked! We're delighted and worried at the same time – now we have to deliver this. It's a complicated piece, both in content proposal and technical delivery. I am however confident that with a good team we can do this. Hurrah!



WATERJET CUTTING

The process used to create the contours of the *Liverpool Map's* 17 layers was, literally, cutting edge. Liverpool's familiar details – like the Mersey River, road network and boundary lines in red, blue and yellow – were shaped by waterjet cutting, creating three - dimensional, brightly coloured shapes, and a depth in the map that you don't see in the printed layers.

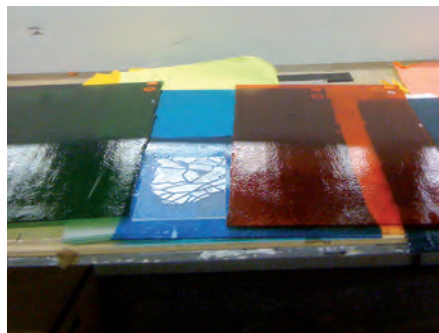
Using an industrial manufacturing technique, high - pressure water is mixed with sand to produce a powerful stream of water. The water 'jet'

cuts through the glass, which is supported by a metal grid in a large pool of water, needed to stop the glass from getting hot enough to melt or crack. The waterjet machine at the National Glass Centre in Sunderland (one of a only a handful in university art schools worldwide) was used for its ability to produce precise shapes that wouldn't be possible through traditional glass cutting methods.

A CAD (computer aided design) file from Ordnance Survey was used to create an accurate image of Liverpool's

geography. From the resulting vectors, drawings of the map's features were produced, which were then grouped by colour, and cut on the waterjet.

The map's features were made more distinctive by using contrasting colours – so a network of streets cut in dense white glass represents the 'heart' of the city, while the area between the streets was filled with bright blue glass, cut precisely to match. Composed of positive and negative spaces, the map's bright palette of colours was built up gradually, add-



ing boundary lines in red, yellow and blue, and a dazzling sea blue colour to represent the river. Once cut, the coloured parts were assembled and fused together to create a complete layer.

The scale of the project forced Jeff and Inge to invent and adapt established techniques. Borrowing concepts based on jigsaw puzzles and model toy kits, they painstakingly created the multi-coloured glass details, all designed to fit each other perfectly.

Their blog shows that while cutting the complex edges of the Mersey estuary, the pair struggled with losing the

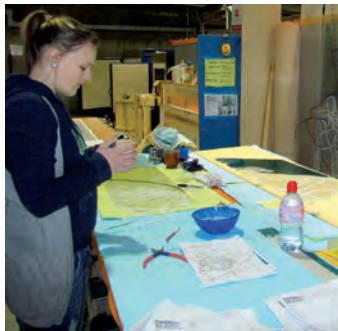
tiny pieces, which were falling through the grid of the cutter and into the sandy water below. To solve the problem, Jeff adapted the toy kit idea – the tiny parts stayed attached by a delicate spoke, which kept them from breaking away from the glass sheet. This also had the dual benefit of making the tiny parts much easier to put back together again when constructing the layers.

The individual components were then assembled in a kiln. To keep the sheet a consistent shape while the glass was melting, a heat - proof dam was laid at the edges of the glass. The waterjet layers were fused into full sheets like a gi-

ant jigsaw puzzle. The final work includes three waterjet layers, fused with printed elements of the map and registered (see box) to fit with each other.

REGISTRATION

Registration is a traditional printing term, but it applies equally to layers of glass as it does to inks printed onto paper. Registration involves the alignment of different colours – and shapes, in the case of the *Liverpool Map* – in a very precise way, to make sure that everything stays in the right place once the layers are stacked up. You can tell when colour layers are poorly registered – usually on things that are printed quickly like newspapers – because it produces a blurred effect called a moiré pattern. It's especially important when printing multiple sections of one image, which have to match in order to read well. The advantage to registering stacks of glass, as opposed to paper, is that glass is transparent, so you can see how things line up. However, because the glass in the *Liverpool Map* is thick, and there is space between layers of print and waterjet cutting, perfect registration is only visible from directly in front of the artwork. The alignment appears to be slightly distorted from an angle.



SCREEN PRINTING

More than 140 graphic elements feature in the *Liverpool Map*, including photos of the city's living and breath-

Halftone: A technique that many will recognise from old newspapers. A photograph is transformed into a grid of tiny dots (just black in the case of old photographs, and cyan, magenta, yellow and black for colour images). These dots vary in size and space between each other to produce the illusion of continuous tone or gradations.

ing icons, fondly remembered faces, and favourite buildings. The images are printed in multiple colours, overlaid to resemble

a topographical terrain, but allowing viewers to pick out important people and places in Liverpool.

The artists used screen printing to create the graphics on large sheets of glass. Halftone versions of the photographs (see information in the box, above), were made in Photoshop and

printed on acetate film to match the shape of the glass.

Not all of the images are photographs – some of the map's finest features are hand-drawn. The 'community' layer – a collage of handwritten text made by local people – was scanned, resized and placed, to reflect memories of particular locations in the city. Finally, hand-drawn maps of Liverpool from the 1800s inspired the largest and most detailed drawings. In a tribute to historical mapmaking, the artists' interns used dip pens and ink to recreate the fine contour lines of the Mersey. This massive line drawing took nearly a week to make, but gives a hand-made quality that would be impossible to achieve on a computer.

Once completed, the images were printed onto transparent paper and tightly pressed tightly to the printing screen (a nylon mesh stretched over a wooden frame) and exposed to UV light, producing the stencils. No mean feat – nearly 100 individual stencils were produced to create the densely layered imagery of the *Liverpool Map*.

Printing enamel onto glass isn't usually difficult, but this was an unusual project, simply because of its sheer scale. Neither was the print bed long enough to accommodate the two-metre-long thin sheets of glass, nor were the screens big enough to match the transparencies. To solve the problem, Inge and Jeff built a bespoke wooden table on a steel frame, to wheel

the huge layers of glass from the print area to the kiln with the least amount of risk.

Finally, the transparencies were split to fit onto screens no longer than a metre; this way they could be printed individually, and the image assembled on a single sheet. Printing on clear glass was a definite advantage; they were able to register the screen images (see page 85) to a paper copy laid onto the table underneath the glass and, because the glass is transparent, it was easy to position.

Ceramic enamels were applied to each screen and squeegeed through the mesh thus depositing the enamel on the glass. Ceramic enamels were

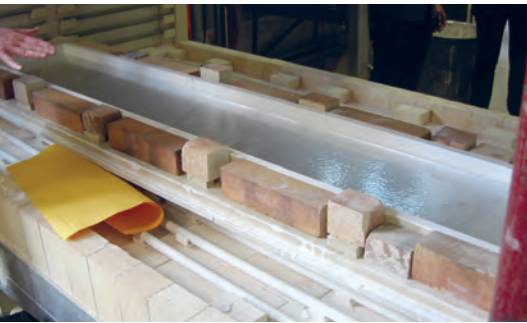
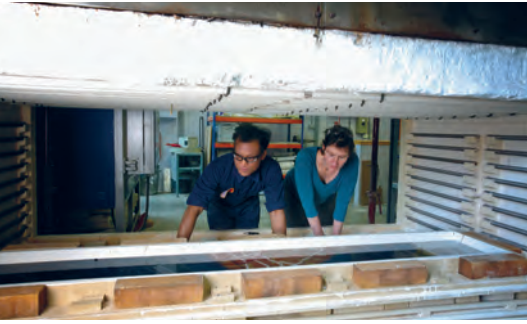
used to withstand the high temperatures of the kiln. Each layer of images was printed in different enamels, mimicking the colour palette of a map – portraits of cultural heroes in two shades of green, historical moments in two browns, iconic buildings in black, the river in a transparent blue, and the community layer text in red.

In total, 52 sheets of glass were printed, usually more than once, and fired in a kiln at a low temperature to ‘fix’ the enamel. Registered precisely on their custom-built table, Inge, Jeff and their team were able to print the deeply layered graphics to the glass, giving the viewer so much to see in front of, behind and through the *Liverpool Map*.





THE KILN



With the 17 layers completed, the glass was stacked in order and placed in a large electric kiln, to be fused in a process known as kilnforming. The kiln at the National Glass Centre – one of the biggest in Europe – is designed to fire huge pieces like the *Liverpool Map*, which require long firing schedules and precise temperature control.

Each of the six firings contained 100kg of glass. Once molten, the glass takes on any detail of the surfaces it touches. Mistakes could leave blemishes that would require extensive polishing, or distortions that would result in the loss of months of work. The glass can also move at full firing temperature, so Jeff and Inge's first job was to find a way of containing it when hot,

building a fireproof framework of high-temperature ceramic bricks, boards as a mould to shape the final columns.

Again, the kilnforming of the *Liverpool Map* called for custom solutions, because none of the materials were made for work of this scale. To create a flat surface in the kiln, three long, ceramic shelves were laid end-to-end and shimmed with small steel plates, to make it as level as possible, with a wet mix of plaster and molochite filling the seams. To stop the glass sticking, and leave the cleanest possible surface, the kiln floor and glass sheet edges were covered in a ceramic fibre sheet, painted with a 'kiln-wash' release and topped with a piece of Thinfire, a paper-like ceramic material.

The artists chose to make the *Liverpool Map* from Bullseye Glass, manufactured specifically for kilnforming. Bullseye is renowned for a wide range of colours that can be fused together without cracking (known as compatibility), but also for the technical know-how of its research and education staff – it developed a system of vermiculite ‘sleds’ in 2008 to support the fusing of large glass panels for ceramic sculptor Jun Kaneko, and the mould for the *Liverpool Map* was adapted from this framework.

In the kiln, the glass was gently heated to full fusing temperature of 830°C (considered a ‘warm’ glassmaking temperature), then very slowly cooled. This process of controlled cooling, called

annealing, alleviates stress from the glass, making it safe to display. Despite the large amount of glass, the annealing of the columns took only six days – no longer than the small test samples – because the length of firing depends on thickness, rather than length.

One of the complications in fusing large slabs of glass is thermal expansion – the glass grows slightly bigger in extreme heat. On smaller work, an expansion of 0.7% is pretty insignificant. But, heated to full fusing temperature, the 225 cm slab of glass expands by 1.6 cm, with enough force to shift the sleds supporting its ends. Finally, a system was devised with sliding supports at both tall ends, allowing the glass to expand and contract.

Removing the solid blocks of glass from the kiln was no mean feat either. Each column had to be carefully handled out, with four industrial suction cups attached to the face of the glass and steel bars inserted in the handles. It took eight people to lift out each sheet, place it on a table and roll it out to make way for the next firing.

After a six day wait while the kiln returned to room temperature, Jeff and Inge were filled with relief and excitement that accompanied the first, and every, opening of the kiln. But the result was worth the planning, the wait, and the nerves. All six columns fired beautifully and were stored in temporary crates, awaiting the final process – coldworking.

POLISHING AND PACKING

The six columns emerged unscathed from the kiln, ready for their finishing touches. Coldworking is the process of grinding and polishing glass – a noisy, messy and grueling job, but the end product shows off the best qualities of the material.

There were two phases to coldworking the *Liverpool Map*. Grinding the glass with coarse diamond abrasives removed the sharp edges and corrected areas that came out of shape in the firing. But it also left a rough, cloudy finish. Polishing with felt discs and fine powders restored its optical clarity, allowing viewers to see through the glass and pick out the individual layers within the solid fusing.

Inge and Jeff's careful calculation of firing schedules kept the glass at a high fusing temperature for the shortest possible time during the kiln-forming stage, preserving a naturally glossy finish. Their intense preparation of the kiln floor left the rear surfaces with a lightly textured finish through which the printed images in the 'culture' layer are fully legible.

The success of the fired glass came as a massive relief – polishing huge expanses of the front and back surfaces would have presented a considerable risk. Although the tools used in coldworking are designed to spray water and prevent overheating and cracking (hence its name), it's always possible to lose a piece – especially at the final

polishing stage when the friction of the felt disc spinning rapidly against the glass makes it warm to the touch.

This left the top, left and right edges of each column to be finished. The glass was not only heavy but also cumbersome – two to three strong men were needed every time a column was moved, so the goal was to minimise the number of times it had to be lifted or turned over. A purpose-built jig was constructed, so the glass could be set securely on its edge and easily polished. Mounted on wheels, the glass was rolled from the kiln to the coldworking area, a wet room equipped with drains and compressed air for two water-fed angle grinders, one pneumatic and one electric.



Though only the narrow faces of the sculpture were brought to a full polish (less than a square metre in total), the coldwork process lasted 20 days for the six columns. Armed with an assortment of diamond - embedded

ly brought the glass from a bumpy matt surface to a perfectly see - through polished edge.

Finally, each column was packed into a wooden crate, lined with polystyrene and furniture foam, ready for freighting to Liverpool.

FROM THE BLOG

9 July 2010

Today we are packing the very first completed column. John, another member of our little team, has made us six bespoke crates. Each one is constructed of a sturdy timber frame and lined with heavy - duty plywood. The inside is lined with a polystyrene outer casing and a foam inner casing. The glass is lifted into place manually by Jeff and Tim.

It's satisfying to write the details on the closed crate; this makes the column ready for its journey to its final destination. It will now be kept in storage in the university until the Museum of Liverpool is ready to install it.



INSTALLATION

With the museum nearing completion, the map travelled to Liverpool. The museum drivers had spent the last few months collecting things from all over the country to display at the new Museum of Liverpool; the *Liverpool Map* was one of the last items to be picked up, because of its fragile nature.

Taking over four hours, the installation required a delicate balance of brute strength and finesse. The artists watched – and winced – as three men

lifted each column out of the crates, tilting it vertically into the base. The glass slabs were designed to be set closely together, leaving little room to manoeuvre and no margin for error.

It was the first time Jeff and Inge had seen their creation standing upright, with light streaming through the huge window behind it. 'I hadn't initially planned on coming, because I find installs relatively terrifying,' Jeff admitted. 'One single section from

the Liverpool Map is twice as big as any piece I've made before – but I'm relieved it's up. It looks extremely close to how we envisaged it'.

The map is set in a custom - made structure bolted to the gallery floor. An engineer calculated the weight of someone pushing on the glass, and the structure is designed to protect the glass from toppling should anyone fall against it. Six steel sleeves are welded to the base, each lined with a thick lay-



er of neoprene, an industrial rubber, to make sure that the glass and steel never touch. Beacon Display's Jim Birch supplied the technical data, using the half scale sample to test the structural support, prior to installation.

Once each column was in place, the neoprene sleeves were pushed in and any gaps packed tight with slivers of hard plastic board, to make sure the glass can't move. Bolts in the steel sleeves were tightened by hand, as using tools would apply too much pressure and crack the glass.

With all six columns in place, the plinth, which has cut-out holes for the columns, was raised into the air and gently brought down into place

over the glass. The plinth was drawn by Redman Design and made from Corian, a composite of stone and resin, also often used as kitchen or bathroom countertops.

The installation complete, the artists showed the team behind the map details on the glass. At the press launch later that day, patron Phil Redmond saw the completed map for the first time, and was delighted with the result. Inge described how the gathered press and staff tried to 'find their way home, and traced routes on the map of their familiar routes and places'. She said, 'It showed us that the *Liverpool Map* had achieved its aim: to provide a sense of place for the people and visitors to city of Liverpool'.

The *Liverpool Map* had reached its final home in the People's Republic Gallery, opposite the Liver Building and with spectacular views of the Mersey. The map, though dwarfed by the size of the window, is anchored firmly against the cityscape, which is fundamental to the concept and the content of the sculpture.

FROM THE BLOG

27TH JANUARY 2010

Whilst Jeff keeps the kilns going, I travel down to Liverpool to meet up with Jen at Liverpool Museum, and her team. I'm introduced to Becky from Redman Design, who has been appointed to design the plinths in the gallery. The map will be housed in a specially designed and engineered steel plinth. Becky will liaise with me on the design of the plinth and will involve an engineer to calculate the loading and support needed to keep six tall slim glass blocks upright and safe! It's nice to be involved and feel supported within a larger team; usually I would have to do all this by myself!



THANKS

It wouldn't have been possible to put this book - and indeed the Liverpool Map - together, without the help of the following people, to whom we're very grateful:

National Liverpool Museum

Georgina Young
Zelda Baveystock
Jen McCarthy
Justina Heslop
NML photo archive
Dr Janet Dugdale,
Lucy Cattell

Open Culture

Charlotte Corrie
Christina Grogan

Liverpool Post

Liza Williams
Laura Davis

University of Sunderland

Tim Betterton
Robert Winter
Raili Velt
Helen Ankudinova
Matilda Kästel
Emma Garnham
Robyn Townsend
Jenna Barcroft
Erin Dickson
Marian Brenes
Christine Keers

Liverpool Record Office

Also thanks to

Theresa Easton
Bettina Nissen
Crispian Heath
Bullseye Glass
Pearsons Glass
Stewart Bale
The Worshipful Company
of Glass Sellers of London

PHOTO CREDITS

BBC Radio Merseyside for permission to use extracts from the *Liverpool Saga*

David Williams

Fiona Shaw

Inge Panneels

Jeffrey Sarmiento

Liverpool Post and Echo Archive

Liverpool Record Office

National Museums Liverpool Photographic Archivel

Open Culture:

Charlotte Corrie

Christina Grogan

Simon Bruntnell

Stewart Bale