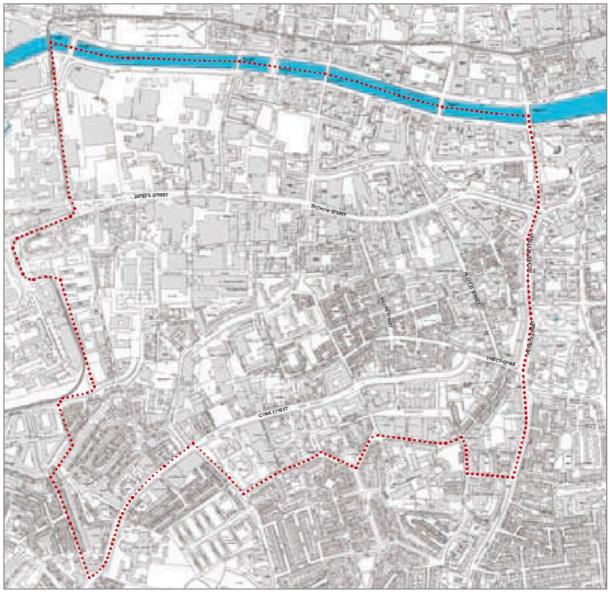
INTRODUCTION – WHAT A LOAD OF BOLLARDS

Bollards lurk in the no man's land of our city streets — on the verges, the boundaries, the 'culs' of cul-de-sacs. Omnipresent yet ignored, walked-around or accidentally bumped into whilst texting. They are a definitive, although almost unnoticed, network of markers all around us. Indeed 'bollards are as ubiquitous as they are overlooked' (Reliance Foundry, 2017). This holds when it comes to design history, since 'records pertaining to their original manufacture and installation are rarely available' (Harvey, 2005, p. 2). In terms of popular culture, bollards reached peak acclaim in 2011 when John Kennedy, author of the *Bollards of London* website, was named as one of *The Guardian*'s top London bloggers (Hill, 2011). Kennedy started the blog in response to a challenge from his friend 'Big George Webley' who didn't believe *anything* could be made interesting, and bollards were chosen for the impossible-to-make-interesting mission (personal communication via email, 14 April 2018). In my research for this case study, I discovered Big George Webley wildly underestimated the chosen subject.

Bollards are 'short posts used to prevent traffic from entering an area' (Oxford English Dictionary, 2013), however they evolved from building sites and quaysides. From a review of archaeology, anthropology and architecture journals, the oldest use noted is in ancient Rome where bollards were used with ropes in quarries to 'manoeuver heavy stone blocks' (Sidebotham, et al., 2001, p. 148). Nautically, bollards still exist as posts for attaching mooring ropes. On city streets, bollards arrived as the forerunner to pavement kerbs, and they remain in our urban streetscape installed to prevent vehicles mounting the footpath and to alter urban layouts (for example, to convert a through-road into a cul-de-sac). More recently security bollards are employed as a perimeter-hardening apparatus. Bollards exist to serve the street on which they stand.

As an intrinsic and intriguing element of the streetscape, this essay explores the interplay between the bollard and the street, specifically Thomas Street in Dublin

8, with a total of 64 bollards along just 600m¹. According to Dant (1999, p. 2), 'social human beings establish what we might call 'quasi-social' relationships with objects in which they live out in a real, material form the abstract relationship they have with the wider society in which they live'. This essay will use the case study of Thomas Street, the central street through the Liberties district of Dublin, to explore our relationship with bollards and consider how the material experience of the planned public realm² shapes, and is shaped by, the broader urban cultural environment.

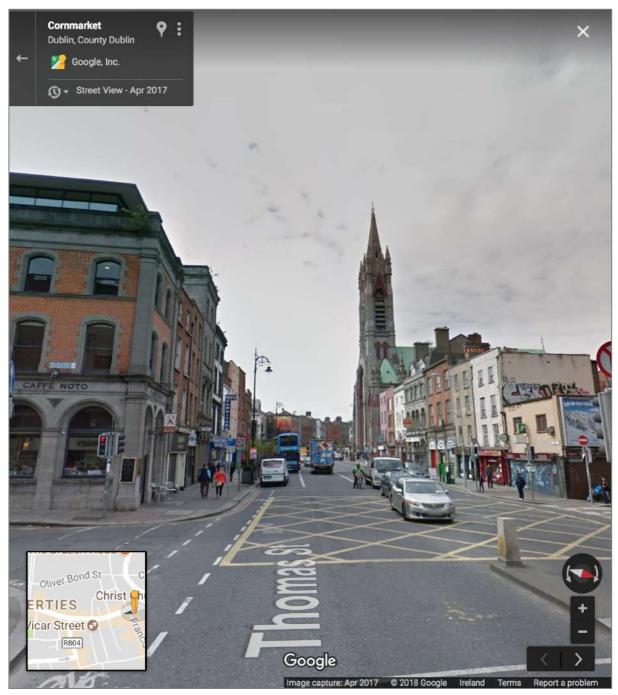


Map showing the Liberties boundary with Thomas Street as the most central main artery. The district of the Liberties lies just west of Dublin's city centre. (Dublin City Council, 2009, p. 5).

¹ See Appendix A for the full listing.

² 'All this publicly accessible space between buildings, including the empty spaces, streets, pavements, and voids in the urban fabric or other structures enclosed by them, is the 'public realm'.' (Dublin City Council, 2012, p. 11)

53°20'35.1"N 6°16'34.2"W - THE HIGH STREET OF THE LIBERTIES



Looking along Thomas Street from its easterly starting point, as captured by Street View (Google, April 2017)

Known as the 'Great Street' by the Anglo-Normans (Dublin City Architects, 2015), Thomas Street starts at the junction of Francis Street and the slightly offset St. Augustine Street, and heads west away from Cornmarket, first dipping a degree south then curving north to its end at St. James' Gate. At any point along Thomas Street, we are never far from the dominant forces of religion, retail or industry.

In the local authority reports and documents (Dublin City Council, 2009, 2014, 2017), Thomas Street is often referred to in terms of a thoroughfare – an 'approach' or a 'route through', a way from one place to another³. Other reports counter this wayfaring perspective by arguing its 'primary function is retail, not a traffic route' (Dublin Civic Trust, 2012, p. 66). Furthermore Thomas Street is a conservation area (O'Halloran, 2008, p. 3). These expressions of the street as a civil engineering artefact or a commercial entity or a site of preservation means the everyday experience of the street is bypassed. It is my contention that Thomas Street is best understood as a vernacular space, as the high street of The Liberties.

Palaiologou (2015, p. 176) sets out 'the battle of the high street is one between scales: physical, social and time scales' and from this vantage point you can see these played out: Thomas Street has 'an imposing presence' with 'a strong sense of enclosure' and 'a varied, undulating quality' (Dublin Civic Trust, 2009, p. 13); the local community is a 'patchwork of social disadvantage represented by social housing complexes and a new more affluent community attracted by living close to the city centre' (Ait Urbanism + Landscape Ltd, 2013); Thomas Street forms part of an ancient highway, the Slighe Mór⁴, dating from the Viking age whilst simultaneously accommodating active construction sites. Thomas Street occupies the extremes and embodies contradictions on all three scales.

Stephen Coyne, Programme Manager for the Liberties Business Area Improvement Initiative, proudly asserts 'the Liberties is first and foremost a neighbourhood – one of Dublin's best' (Liberties Business Forum, 2016, p. 4). When it comes to describing this neighbourhood, there is much chatter of 'character' and 'uniqueness': How does the Liberties' distinct character and unique identity manifest itself materially on its high street? Thomas Street's centrality has shifted over time as Dublin city grew. These shifts mean it has its own locally distinctive culture. It is not easily defined as either retail or route, residential or commercial, local or tourist,

³ Dublin City Council has designated Thomas Street both as a link route (2012, p. 26) and later as a secondary street (2014, p. 59). However the difference between these designations seems irrelevant at best and unhelpful at worst since the definition

⁴ There are a number of spelling variations, including Slighe Mhór, Slige More and Slí Mhór.

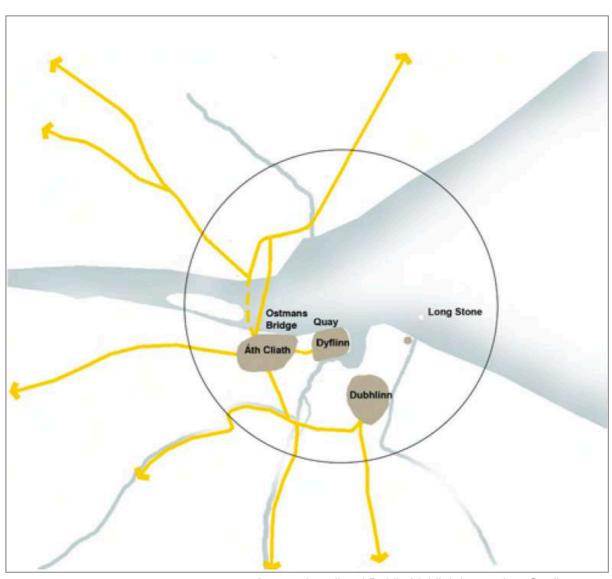
commuter or passer-by. The community is as layered as the demands upon the street-space. The collective values of a community is arguably embodied within Thomas Street, as the material world of the high street forms the context within community social interactions take place.

Long considered a problem child for Dublin City Council with 'a significant degree of dereliction and vacancy' (Liberties Business Forum, 2016, p. 10), a 'tired and outdated' public realm (Dublin Civic Trust, 2012, p. 62) and 'a legacy of centuries of poor planning' (Áit Urbanism + Landscape Ltd, 2013), Thomas Street is currently experiencing a long awaited revival. Henderson (2001, p. 45) remarks 'Thomas Street is fortunate in that it is one of the key boundary streets within Dublin Corporation's Liberties/Coombe Integrated Area Plan'. Indeed Thomas Street's fortune is plentiful, with countless documents impacting on its ongoing development, collectively establishing a narrative of great promise for growth. It is the policy of Dublin City Council to protect and enhance the character and historic fabric of conservation areas in the control of development'⁵ (O'Halloran, 2008, p. 11) – however, what happens when neglect and poor planning forms part of that fabric?

Now I intend to bring you, the reader, along a textual tour pausing at several stops⁶ along Thomas Street, jolting back and forth in time whilst exploring various interpretations of its particular bollard-scape as we travel westwards. Through being attentive to the different designs of bollards along the tour, a disordered morphology emerges befitting the jumbled bricolage of the street.

⁵ Dublin City Council Planning Policy H13.

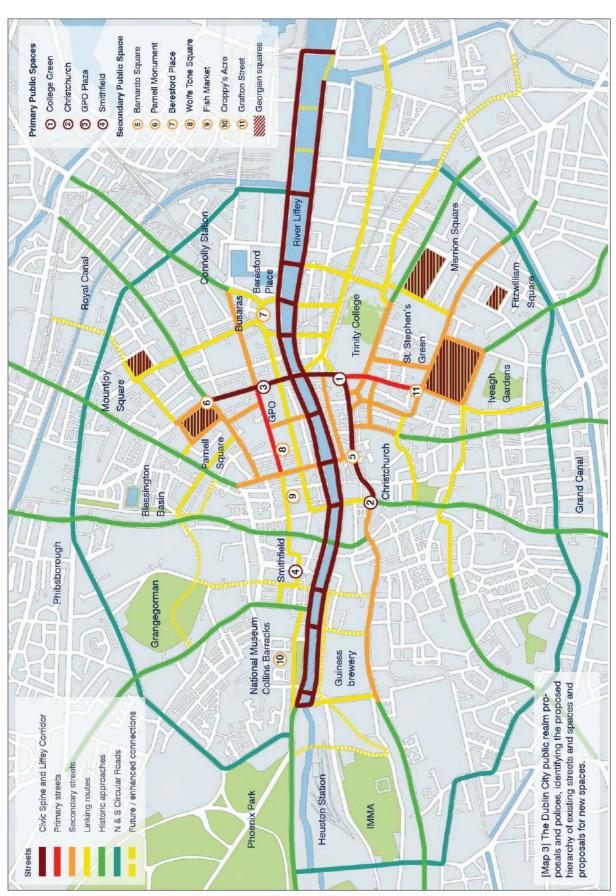
⁶ John's Lane Church; Molyneux Yard; National College of Art and Design (NCAD); St. Catherine's Church; the junction of Thomas Street and Bridgefoot Street; Arthur's Pub; and the Irish Agricultural Wholesale Society (IAWS).



A map of medieval Dublin highlighting ancient Gaelic routes

– Thomas Street is part of the road leading west out of 'Áth Cliath'

(Dublin City Council, 2012, p. 19)



In Dublin City Council's public realm proposals Thomas Street is the only secondary street on the west side (Dublin City Council, 2012, p. 39)



Where does a street start and end? Map indicating the boundaries of Thomas Street (Dublin Civic Trust, 2012, p. 10)

53°20'34.6"N 6°16'38.6"W – THE POETRY OF SYMMETRY



The façade of SS Augustine and John Church (photo credit: Majekodunmi, 2018)

Many stand here and lean against one of the six black bollards in order to remain steady whilst attempting to sight the top of the spire of SS Augustine and John Church, known as John's Lane Church. John Ruskin⁷ described the building as 'a poem in stone' (John's Lane Church, n.d.), as though from the geometric architecture emerged a divine lyricism. It's almost a sin not to devote multitudinous pages to the Pugin French Gothic design and the Harry Clarke Studio stained glass windows inside⁸.

Let us shift our earthly focus from the background to the foreground. The configuration of the street furniture⁹ outside John's Lane Church on the one hand

⁷ Described on the Ruskin Museum website as an artist, critic, pundit on aesthetics and ethics, a thinker, seer and a social revolutionary who 'challenged the moral foundations of Victorian Britain' (Ruskin Museum, n.d.).

⁸ The church's website hosts detailed information on the history, architecture and the stained glass windows, as well as the organ, bells and shrines – see https://www.johnslane.ie.

⁹ A designer of street furniture, Millet defined it as 'those items independent of the main fabric of architecture which service the spaces between buildings to give the appropriate level of amenity' (1972, p. 121). Within the context of civic authority in Dublin,

invites the physicality of the 'lean against' and on the other the balanced visual of symmetry. Observe the trinity of bollards on either side of the central entrance, elegantly winged by what Dublin City Council calls 'high quality planter boxes' (2014, p. 31) – the church's pitched copper roof reflected upon the street through boxed greenery. The bollard and the planter operating concurrently, both in relation to each other and as a union of street furniture in relation to the church. A pleasing visual frame for the poetic aesthetics. John's Lane is therefore symmetrical inside, outside, and beyond the perimeter of the church's railing. The design of the individual pieces of street furniture and their collective arrangement augments the value of place, and comes to define the whole space outside the building.

The bollards themselves individually possess a simple symmetry, with balanced proportions and a fluted body and gentle domed top. As the church itself was designed in homage to thirteenth century French Gothic architecture, so the bollard 'is based on the classical Greek architectural column of over 2,000 years ago' (personal communication with Nigel Abbott via email, 23 April 2018) and in fact proclaimed the 'Doric' in the manufacturer's catalogue for that reason (Furnitubes, n.d., p. 6). Introduced in the late 1970s 'when decorative Victoriana cast iron furnishings were popular' (personal communication with Nigel Abbott via email, 23 April 2018). Would Ruskin have appreciated the Doric's 'decorative fluted sides' (Furnitubes, n.d., p. 6)? Or would it have irked him that they clashed with the Corinthian columns inside? Writing for Design Quarterly in 1982, Brown (p. 16) preaches a doctrine of street furniture that 'has a faintly historical and timeless air...chosen to appeal to many tastes and to adapt to changes in taste'. The Doric bollard evokes a Victorian age grandeur, still familiar to many today and relatively inoffensive to personal tastes.

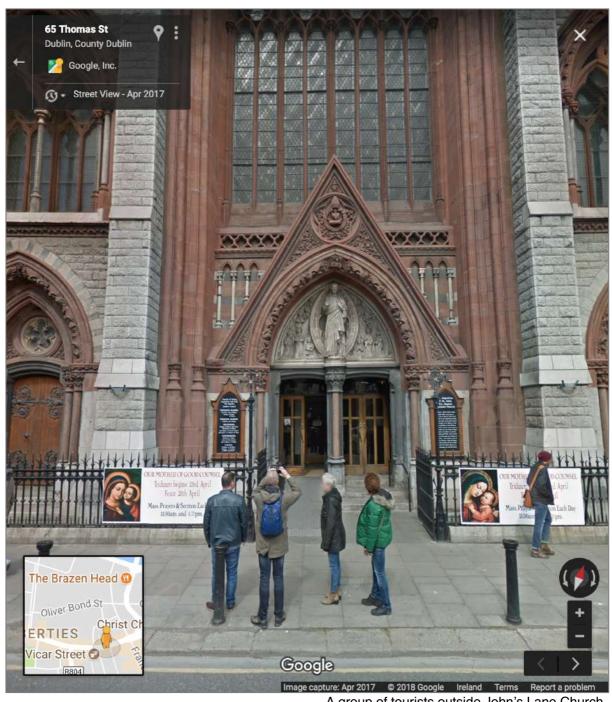
In an attempt not to detract from the architectural composition, the city planners adhered to the creed of sacred geometry, a street level intervention manifested upon the pavement, the bollards consubstantial with the architecture. As a religious

the official definition is: 'Items placed within the street with the purpose of directing movement and/or enhancing its place value.' (Department of Transport, Tourism and Sport; Department of Environment, Community and Local Government, 2013, p. 155).

10 Two of the six bollards outside John's Lane Church carry the brand name 'Furnitubes'. Available for purchase since the 1980s, the Doric is the single Furnitubes product supplied to Ireland and is one of the company's best-selling cast iron bollards (personal communication with Nigel Abbott via email, 23 April 2018).

institution, symmetry is significant in its construction of a dominating physical presence to symbolise power and status. It is a mortal impulse to seek out and respond to patterns within our surroundings. Lynch (1960, pp. 2-3) defines the legibility of the cityscape as 'the ease with which its parts can be recognized and can be organized into a coherent pattern'. In this way the street furniture outside John's Lane facilitates the church's visual recognition and powerful religious identification – the physical, visual and symbolic interrelated within the public sphere.

Previously there were eight bollards outside John's Lane. The decision to remove two bollards and add in two wooden planters was well intentioned. Whilst the design choice and placement may adequately serve – if not elevate – the architectural excellence of the building façade behind them, it is a cardinal offence their installation wasn't also high quality. Believable from a distance, a closer inspection seeds doubt. The removal of the outer bollards left a scorched round mark, an unforgiveable devilish circle. It is a slothful and untidy improvement. In this regard, it is not their design nor placement that confesses to us something about the urban culture of Thomas Street. The pavement has been desecrated. The bollards – six present and two absent – "act as a cipher for the narrative of regeneration" (Herring, 2016, p. 1). In other words, guilty of being all fur coat and no knickers.



A group of tourists outside John's Lane Church, as caught by Street View (Google, April 2017)

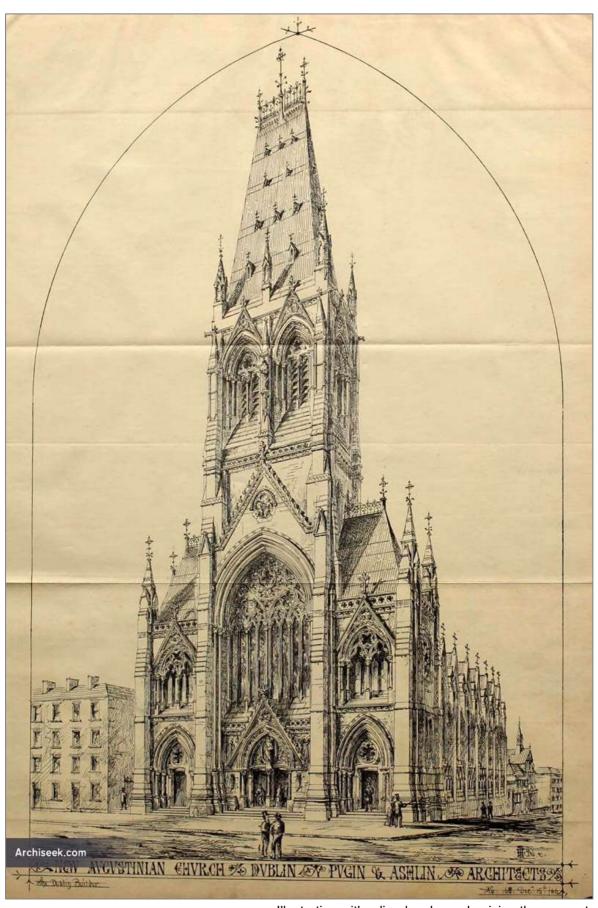


Illustration with a lined arch emphasising the symmetry (Archiseek, n.d.)

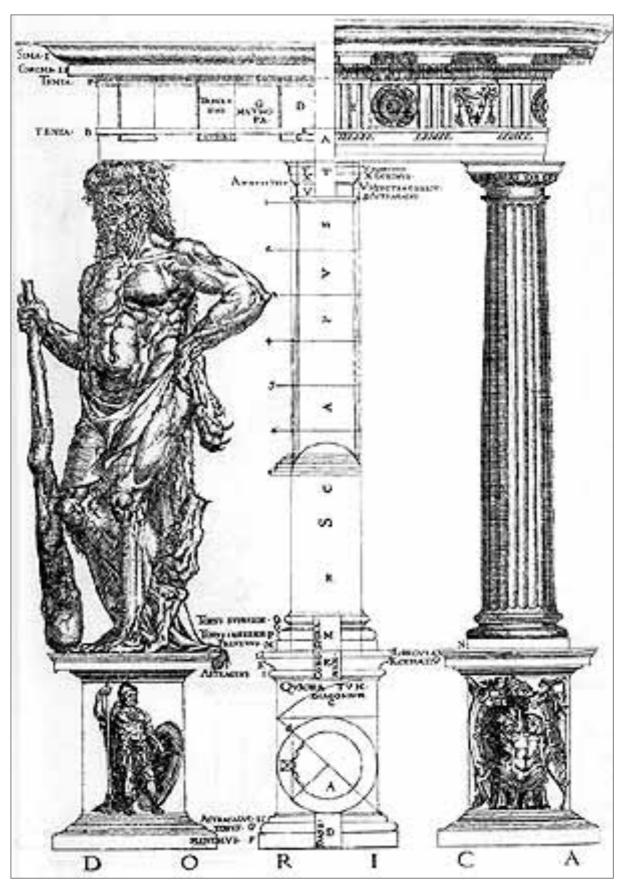
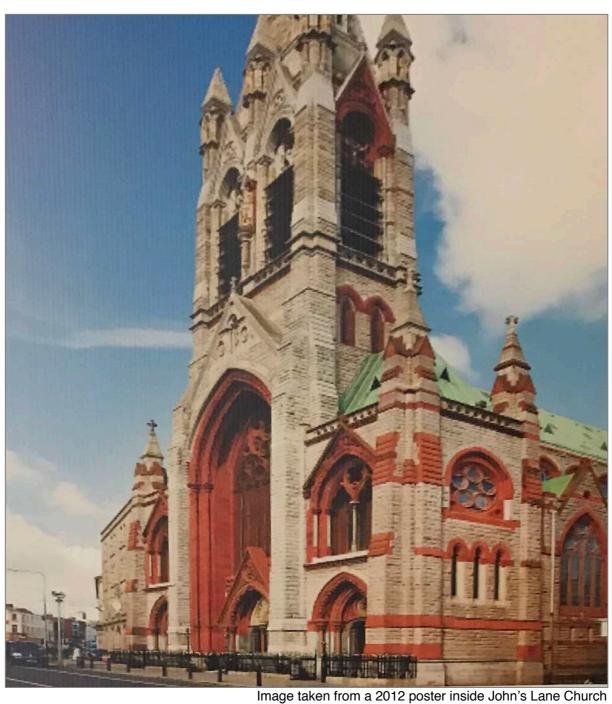


Illustration of the Doric column order with Herculean Atlas (Arcspace, 2012)



age taken from a 2012 poster inside John's Lane Church clearly showing eight bollards and no flower planters (John's Lane Church, 2012)



The remains of the removed bollard (photo credit: Majekodunmi, 2018)

53°20'33.8"N 6°16'41.7"W - THE BOLLARD THAT WASN'T



From Molyneux Yard looking out towards Thomas Street (photo credit: Majekodunmi, 2018)

Identified by Rocque as 'Molineaux's Ya.' (1757), Molyneux Yard is an alleyway off Thomas Street that survives as a medieval right of way (Henderson, 2001, p. 46). With its entrance integrated into the ground floor frontage of 54a¹¹, Molyneux Yard is said to be where Captain Samuel Molyneux experimented with munitions (William Curry, Jun., and Company, 1841, p. 485). Although the alleyway has roots in a specific era of Dublin's history, it is best understood 'as being conditioned by the interaction between 'inherited' spatial configuration and contemporary life.' (Charalambous & Geddes, 2015, p. 80). Central to that interaction and guarding the entrance to Molyneux Yard is a cast iron vertical obstacle. Immediately it stands out as it holds a 'supreme visual quality...which, without necessarily comprehending, we recognise as successful' (O'Connell, 1975, p. 9). Intuitively perceived by the passer-by, its presence lends an atmospheric and ornate richness to the setting.

This skilfully crafted and stylish bollard is in fact an object repurposed, as it once formed the base of a gas lamp standard introduced to Dublin's streets in the 1840s (O'Connell, 1975, p. 47). Bollards have long been objects reimagined as another, with decommissioned cannons in the seventeenth century used on quaysides, buried in the ground muzzle-first (Furnitubes, n.d., p. 4). Unintentionally preserved through financial necessity, or what O'Donoghue (2010, p. 4) calls 'an accident of the economy of Dublin City Council', it is to our good fortune that this local landmark was recycled and survives today.

Instead it is not the object as a whole but the bollard's paintwork that retains the most direct continuum with the past. Painted a similar shade to the adjacent brick wall and metal gate, the grey colour is muted in daylight and minimally reflective at night. The grey palette is repeated along Thomas Street, particularly on disused shop fronts in an effort of visual harmonisation. Dr Mee speculates the origination of the grey paintwork was the result of 'an environmental improvement project undertaken for the street as part of the introduction of a quality bus corridor¹² a few years ago'

-

¹¹ Dating to 1800, number 54a has been occupied over the years by Patrick Neil as a dairy, by Michael Murtha as a 'provision dealer', later by grocers, victuallers, butchers and chemists (O'Halloran, 2008, pp. 7-8). It is currently an Italian 'delightful takeaway' (Just Eat, n.d.).

¹² The quality bus corridor works were carried out October 2013 - December 2014.

(personal correspondence via email, 24 April 2018). Ironic when you consider the word 'grey' can mean characterless and nondescript, whilst also being used as a hue to brighten an area.

Without conducting a paint analysis, we can only speculate what lies beneath. Certainly there is black paint¹³, and perhaps deeper there is a deep green, like many other surviving gas lamp standards in Dublin. Brunswick Green was often used until discouraged in the 1950s 'upon recommendation of the Royal Fine Art Commission' (Percival, 1958, p. 571). Dublin Civic Trust (2004, p. 15) highlight the significance of paint on ironwork as the 'layers of paint document such changes and add layers of history, which should not be removed when restoring or renewing finishes'. With each coating of inherited design decisions, decorative edges are smoothed and leafing detail blurred. The painted bollard also attempts to erase its maker. On the side of the box base facing into the alleyway, an embossed mark reads:

ST**a**9HG ²SONS UDLI

To decipher it one instinctively reaches out, as if the lettering had a Braille-like quality, unreadable by sight alone. A combination of guesswork, detective work and amateur photo editing, the mark is revealed to be 'Strong & Sons, Dublin'¹⁴. With layer upon layer of paint, history becomes less defined and harder to trace although sealed beneath.

If 'the materiality of the lighting objects oscillates with the materiality of light' (O'Donoghue, 2010, p. 1), what happens when the original reason for existence is lost and the association is fractured? Objects such as bollards 'have the potential to activate the biographical and ancestral memory of its subjects' (Reed, 2002, p. 135). The Molyneux bollard then activates the historical memory that lies both within it and

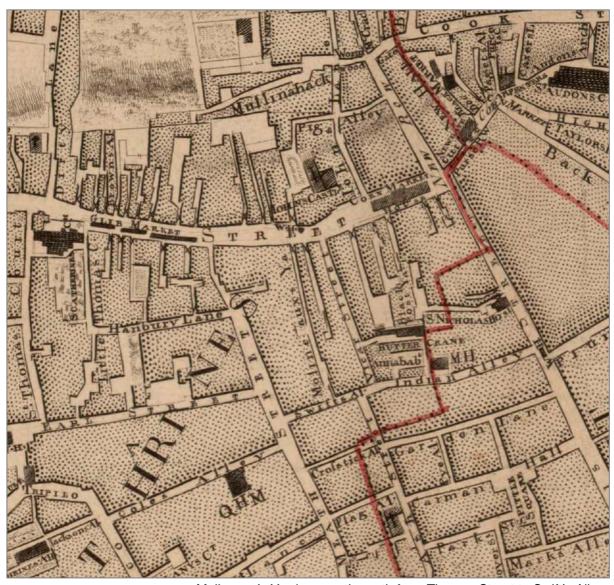
¹³ As evident from a review of photographs. For example, images on the National Inventory of Architectural Heritage website shows the bollard as black (National Inventory of Architectural Heritage, n.d.).

¹⁴ Based on Hammond Lane in 1847, John Guy Strong is listed in *The Dublin Almanac and General Register of Ireland* as 'foundry and iron works, millwright and engineer, and founder to the Corporation of Dublin' (Anon., 1847, p. 736).

around it. It is a witness to a medieval right of passage, to the introduction of gas lighting, to the city's iron industry and, with hay matted at its base, to today's inner city horse stables.

In 1975, O'Connell (p. 51) called for a 'retention policy' that was largely ignored. Of the six references to this specific design on his illustrated Dublin map (pp. 44-45), none remain. Until recently there was one example in Merrion Square; this has also been removed¹⁵. The Molyneux bollard appears to be the only example of this particular model still surviving in Dublin today. It is therefore not just the street's inheritance, but an inheritance for the whole city, entrusted in Thomas Street for celebration and safeguarding.

¹⁵ The mass removal of the Merrion Square heritage lamp standards collection was suspected to be in response to an article by Frank McDonald, the former environment editor of the Irish Times, who was appalled by the state of Merrion Square: 'By far the most inappropriate is the "array" of old lamp standards, culled from the city's streets and re-erected here in haphazard fashion.' (McDonald, 11th August 2009).



Molineaux's Yard ran north-south from Thomas Street to Swift's Alley, now called Engine Alley (Rocque, 1757)

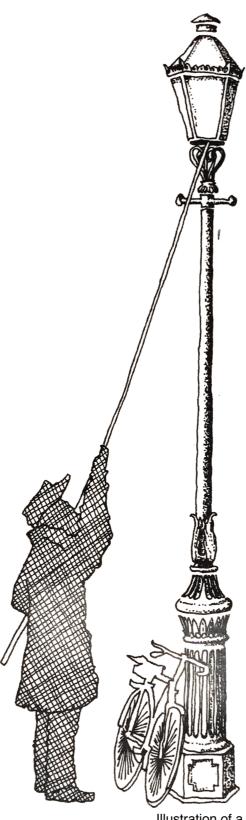


Illustration of a lamplighter lighting a gas lamp (O'Connell, 1975, p. 13)16

¹⁶ 'All gaslights in Dublin were lit and extinguished manually by lamplighters. The lamplighter wore a blue serge uniform, with Dublin's coat of arms on his cap. He carried a pole, which he thrust up through the bottom of the lantern, turning the little tap and lighting the gas jet. In 1884 Dublin had 3,750 gas lamps, lit by only twenty-five lamplighters. An increase of sixpence per week brought their average weekly wage to nineteen shillings.' (O'Connell, 1975, p. 23)

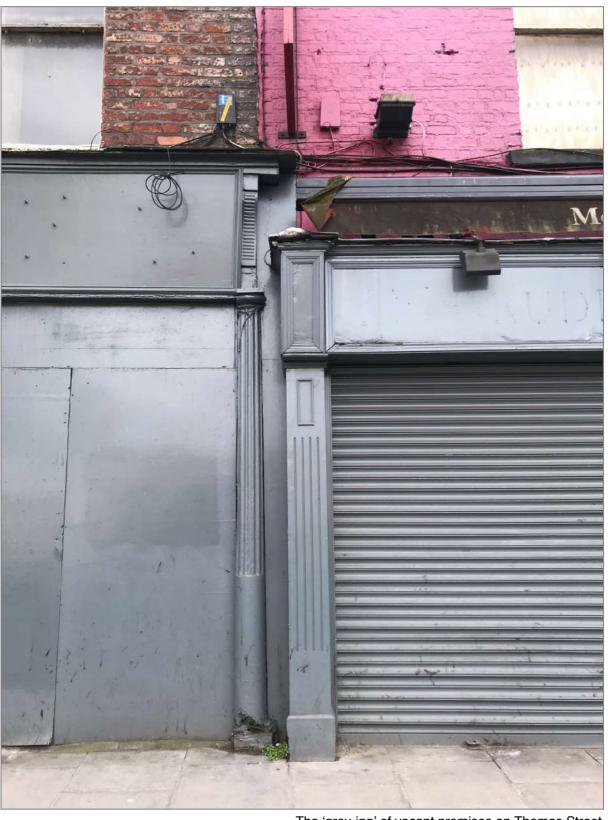


Note the gas lamp standards outside John's Lane Church in 1891, approximately just 50m from the entrance to Molyneux Yard (Talbot-Power, 1891)



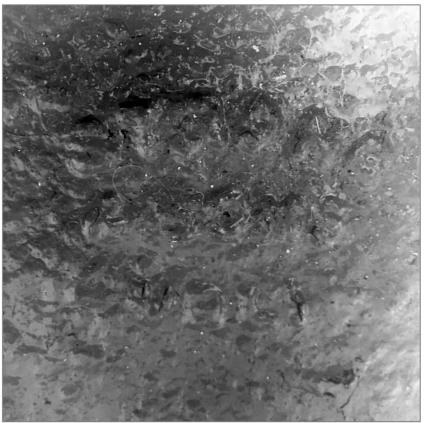
Illustration of the gas lamp standard (O'Connell, 1975, p. 20)

The Molyneux bollard (photo credit: Majekodunmi, 2018)



The 'grey-ing' of vacant premises on Thomas Street (photo credit: Majekodunmi, 2018)





Top: The embossed mark with no filter Bottom: After using an iPhone to enhance shadows and contrast (Majekodunmi, 2018)



Photo of 'BTH Parishes on double arm bracket on cast iron column', taken in Merrion Square by lighting collector Simon Cornwell, date unknown.

53°20'34.4"N 6°16'42.8"W - FORGOTTEN STONES



The main entrance to NCAD (photo credit: Majekodunmi, 2018)

A single cylindrical low-level buttress nestles against the corner of the main entrance to the National College of Art and Design (NCAD), possessing a rather diminutive presence at just 45cm tall. Standing at what was the arched entrance to the counting house for Powers Distillery, this is a jostle¹⁷ stone and would have been placed circa 1791¹⁸ with a section of the stone set beneath ground level.

Also known as wheel guards, jostle stones had an important purpose on streets in the times of horse drawn domination, lying at entrances and along narrow sidestreets. The medieval street layouts of Thomas Street and its adjacent streets, including Molyneux Yard, St. Catharine's Lane and Swan Alley, allowed little room for manoeuvring. With a simple ingenuity, jostle stones protected vulnerable corners of buildings from damage from the wheels of passing vehicles, whilst allowing the wheel itself to continuing rotating and complete the turn (O'Connell, 1975; Hobbins, 2012; McLoughlin, 2015).

In a marked design difference from bollards, jostle stones feature a V-shaped notch 'to facilitate its attachment to the corner it protects' (Hobbins, 2012, p. 24). Their placement also exposes a different relationship to the streetscape. Bollards stand proudly away from buildings and occupy space, compromising the width of the pavement; jostle stones have a more intimate relationship with the building, getting up close and personal with the walls.

On one level, the jostle stones 'enrich the historic quality of the urban environment' (McLoughlin, 2015, p. 37) as their survival provides us with a tangible connection to the evolution of transport on the street. And on the other, jostle stones are like sleeper stones, slumbering vestiges of history. These 'rare features' (ibid.) hold within them a sensory history of the sounds and scars of the scraping of wheel axles against stone – forgotten details of history.

¹⁷ The word jostle originates from the late Middle English word 'justle', which meant to have sexual intercourse with¹⁷. So far I have not mentioned the phallic nature of the bollard as I deemed it irrelevant, however here it would be neglectful not to call out this etymological reference.

¹⁸ The date when the Powers Whiskey Distillery was founded on John's Lane (Powers Whiskey, n.d.).

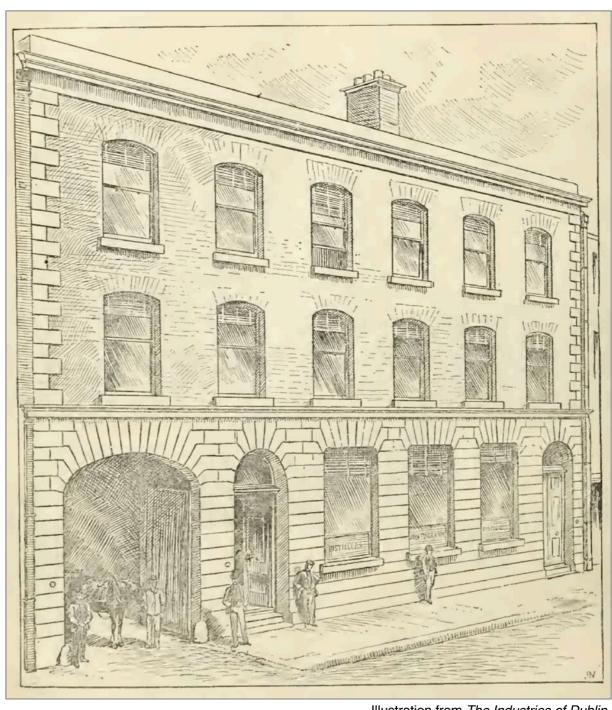


Illustration from *The Industries of Dublin* showing two stones at either side of the entrance to the Distillery (Spencer Blackett, 1887, p. 42)



An overhead shot of the NCAD jostle stone (photo credit: Majekodunmi, 2018)

53°20'35.3"N 6°16'53.0"W - WHAT LIES BENEATH



The public realm outside St. Catherine's Church (photo credit: Welstead, 2018)

One grey torpedo – bruised and battered, shell-shocked and isolated from its peers; Five hexagonal – with an admired 'innovative high quality contemporary design' (Henderson, 2001, p. 49) exclusive to this location on Thomas Street; Nine fluted – the default choice of Dublin City Council – curving round and along down Thomas Court. Those are the fifteen bollards positioned in an arc outside St. Catherine's Church. All entirely fit for purpose.

In a scathing attack on the bollard-scape along Thomas Street, Dublin Civic Trust (2012, p. 72) complains street furniture in the city is 'all too often chosen randomly and placed without consideration, leading to a mishmash of forms and styles'. The simple mantra is: 'A single design of bollard should be used throughout the street' (ibid., p.73). Lamenting a lack of coordinated vision, Dublin Civic Trust (ibid., pp.62, 64) points to the 'overuse of bollards' and 'piecemeal approach', seeing this as

'degrading the urban environment' and 'diminishing pedestrian enjoyment of the street'.

Is cohesion more enjoyable? The modern urban planner says so. Contemporary centres for urban planning are preoccupied with standardisation, strongly advocating visual simplicity and consistency¹⁹. For Dublin City Council, the drive to uniformity will 'set a tone for Dublin' and create a 'look and feel that has a presence' (interview with Siobhan Maher via phone, 8 May 2018). If uniformity is an idealised state of affairs, then the public realm outside St. Catherine's is far from ideal.

Architectural historian Maurice Craig (1952 cited Henderson, 2001, p.24) describes St. Catherine's Church as 'a superbly virile composition in Roman Doric built of mountain granite'. The virility masks thwarted potential. Built between 1760 and 1769, a great steeple and spire was intended for the church but never completed (Wright, 1825, p. 77). It is also the site of Robert Emmet's execution in 1803, stalling the Irish independence movement for many years.

The disjointed nature of the public realm outside St. Catherine's could be interpreted as what Trentmann describes as 'battle zones between rival visions of spatial order' (2017, p. 207). On the surface the trends of urban development is played out on the street's physical surface in a space that has been continually restructured. Above ground, we experience the bollards as boundary markers, space dividers and pavement regulators. But we need to look under the surface. Yes the bollards prevent vehicles from mounting the pavement, but not for the safety of those on foot. Contrary to popular understanding, bollards on Thomas Street are mostly installed to protect what lies beneath, such as basements²⁰ or stone fabric (interview with Siobhan Maher via phone, 8 May 2018).

¹⁹ Including the Commission for Architecture and the Built Environment (UK), the Design Council (UK), Department of Transport, Tourism and Sport (Ireland), Department of Environment, Community and Local Government (Ireland) and Dublin City Council. ²⁰ Underneath St. Catherine's is a vault where 'are deposited mortal remains of the Earls of Meath and their offspring' (Wright, 1825, p. 78).

John Kennedy of *Bollards of London* expressed a hypothesis that 'the more dandy & ornate, the richer that part of a city will be' (personal communication via email, 14 April 2018). What does it mean then that three different bollards have been placed here? My hypothesis is the more mixed the designs in one location, the more noteworthy and incomparable the site is.

In its idealised homogenous state, street furniture could become unremarkable. Thomas Street would be indistinguishable from the rest of the city. An unmatching collection of items such as bollards can 'create an ever-growing store of variety and interest' (O'Connell, 1975, p. 9) in what already is a heterogenous space. Mee reflects that 'sometimes the mix of old and new can add richness…a 'palimpsest' of layers of the historic city, with new and old remaining visible' (personal correspondence via email, 24 April 2018). Experiencing the streetscape as an incoherent entity is to appreciate aesthetic diversity and visually provoking a range of emotional responses.

'Street furniture can project a different face upon the street' (Herring, 2016, p. 2). In the case of St. Catherine's, the bollards project the many faces of Thomas Street. When a city looks the same, it is considered more readable, more understandable, more enjoyable. Yet Thomas Street has always rejected cohesion. It is many things.

Renowned.

Unyielding.

Non-linear.

Provocative.

Multifaceted.

Indomitable.



Millet (1972, p. 124) distinguishes between 'a creature known in the industry as an "engineer's bollard" as opposed to an "architect's bollard".

Would he consider the torpedo to be engineered whilst the hexagonal was architected?

(photo credit: Majekodunmi, 2018)

53°20'35.8"N 6°16'52.7"W - SEPARATION ANXIETY



The traffic bollard at the junction fitted with a baselight that lights at night (photo credit: Majekodunmi, 2018)

With the invasion of the car, came the bollard: 'The world fell in love with the car and the freedom that it seemed to offer. We spent 80 years reshaping all our cities to accommodate it' (Sudjic, 2017, p. 83). The junction at Thomas Street and Bridgefoot Street is a zealous example of vehicular accommodation. No other crossing on Thomas Street is more hostile to pedestrians than this crooked crossroads. With a steep incline up from the River Liffey, Bridgefoot Street confronts Thomas Street with four lanes of traffic – two up and two down – cheek by jowl with a mob of local and tourist²¹ pedestrians. The street furniture equipping this zone consists of traffic lights, a guardrail and a solitary plastic bollard.

The modernist solution to the conflict between foot and wheel was one of separation (Rofè, et al., 2015, p. 223). Championed by Sir Colin Buchanan and keenly

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²¹ Thomas Street has a high concentration of tourist footfall since it is the main route from the city centre to both Guinness Storehouse, the top fee-charging national attraction, and the Irish Museum of Modern Art, the number three top free national attraction (Dublin City Council, 2017, p. 11).

backed by the automobile lobby (Vanderbilt, 2008, p. 32), this divide-and-conquer approach led to the domination of motorisation. Reconfiguring the urban street around vehicular traffic was ultimately to the detriment of other road users as well as responsible for 'the creation of dysfunctional places' (CABE, 2008, p. 2). How does this segregated space operate at the Bridgefoot Street, and does the bollard contribute to dysfunctionality?

Despite being camouflaged as a cheap-looking and worn specimen, the bollard is a territorial and coercive operative. It is placed in the sightline of road traffic turning right off Thomas Street with an arrow pointing out the obvious. For drivers, the traffic bollard is 'an invitation to stop thinking, to stop acting on one's own volition' (Vanderbilt, 2008, p. 26). Any lagging pedestrians are met with a mindset of "the arrow ordered me so". For pedestrians, the upper end of the guardrail and the bollard form a petite gateway which charts the 'desire line'22 – an escape route avoiding the prison-like cage which disrupts the march across the junction. "Mutiny!"

Monderman famously promoted the idea that traffic safety infrastructure – including guard rails and directional bollards – 'is not only often unnecessary, but can endanger those it is meant to protect.' (Vanderbilt, 2008, p. 26). This is because in designing spaces that feel safe for driving, 'well intended designers inadvertently transfer risk from motorists to more vulnerable road users.' (Department of Transport, Tourism and Sport; Department of Environment, Community and Local Government, 2013, p. vii). The alternative design approach is 'shared space'²³ which has emerged from the popularised 'inclusive design'²⁴ movement.

²² In other words, the most direct route from one place to another. 'Pedestrians have little tolerance for delay and studies have found that significant numbers of pedestrians will not comply with the detour/delay created by diversions, such as those enforced by guardrails' (Department of Transport, Tourism and Sport; Department of Environment, Community and Local Government, 2013, p. 23).

²³ 'Shared space is a design approach that seeks to change the way streets operate by reducing the dominance of motor vehicles...and encouraging drivers to behave more accommodatingly towards pedestrians' (Luca, et al., 2012, pp. 53-4).

²⁴ 'Based on the social model of disability – that people are disabled or disadvantaged by society's failure to recognise and meet their needs, not an inherent lack of capability – inclusive design aims to remove the barriers that create undue effort and separation. It enables physical, intellectual and emotional access by everyone to buildings, spaces or services. Inclusive design places people at the heart of the design process, acknowledging diversity and difference' (CABE, 2008, p. 7).

Is there enough space for us all? It's a fair question. Shared space dreams of an utopian streetscape of harmony between foot and wheel where there is 'maximum correspondence between pedestrians and vehicles' in spaces 'nourished by pedestrian and vehicle equally' (Wall, 1995, p. 26). "No you first", "*No*, you first". It is not the cause of spatial equality but the cause of spatial justice that needs to be negotiated:

The need for more walkable communities is also an issue of social equity as it is the poorest and most vulnerable in society, including children, the elderly and the disabled for whom car travel is less of an option. (ibid., p.28)

Social injustice has been acutely felt by Thomas Street over many years. The Bridgefoot Street junction is both a symptom and a contributing factor of this inequity. A balance of mobility and civility for the high street of the Liberties is a cause worth fighting for.



The sticker reads: 'IF THIS BOLLARD IS DAMAGED OR NOT LIGHTING PLEASE CONTACT DUBLIN CITY COUNCIL 1800 29 39 49 PLEASE QUOTE THE EQUIPMENT ID NUMBER'.

The phone number connects through to a 24 hour freefone line for Dublin's traffic control centre.

(photo credit: Majekodunmi, 2018)



Images from the highly influential *Traffic in Towns* (1963)
which drew upon the modernist vision of
a highly ordered and efficient road network
where users were vertically segregated by type
(image source: *A Visual History of the Future*, Dunn et al, p. 19)



Aerial view of the Bridgefoot Street junction showing the 'official' pedestrian path in blue and the pedestrian 'desire line' in red (photo credit: Majekodunmi, 2018)

53°20'35.3"N 6°16'53.9"W – BLACK AND GOLD



Painted bollards on the pavement outside Arthur's pub (photo credit: Majekodunmi, 2018)

Although technically not on Thomas Street, as a quick remark in passing, note the bollards in front of Arthur's pub, clearly visible as we pass by Thomas Court. The concave fluting has been painted gold to match the pub's exterior – an extension of the colour palette to enhance the sensory experience of the streetscape. After all, 'If a city's streets look interesting, the city looks interesting; if they look dull, the city looks dull' (Jacobs, 1961, p. 29). The appropriation of these two bollards expands the spatial boundary of the pub to include the pavement outside and shows how the local business community on Thomas Street finds 'interesting' means to take ownership of the street, albeit in unofficial ways.

53°20'36.5"N 6°17'00.0"W – A MUTUAL UNDERSTANDING



Outside the Irish Agricultural Wholesale Society (IAWS) (photo credit: Majekodunmi, 2018)

With 38.5 metres of frontage, the IAWS building is simultaneously imposing and underwhelming. The 'generous' pavement width is considered to 'set a standard for the rest of Thomas Street' (Dublin Civic Trust, 2012, p. 69) yet the space lacks definition and the uninhabited presence of the four-storey building contributes to a sense of dormant space.

See how the cycle stands and bollards are arranged in relation to each other, the bollards punctuating the spaces between cycle-stand couplets:

!nn!nn!nn!nn!

Although the bollards were in situ prior to the cycle stands²⁵, together on today's street they possess a rhythmic spatial synergy evocative of a Morse code sequence. It is a telling rhythm, tapping out a tempo of temporary uniformity of the streetscape outside a balanced building that is symbolic of the co-operative movement.

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 $^{^{\}rm 25}$ As evidenced in photographs of the building when it was put up for sale (Brunkard, 2014).

53°20'36.4"N 6°17'04.6"W – END OF THE ROAD

This essay has offered a tour through an eclectic collection of mini-case studies covering seven locations along Thomas Street, all with bollards worthy of consideration – proving even what appears to be an uninteresting object is of interest under a searching lens. However this was more than an exercise in paying attention to detail, it was an interpretive activity to explore the material experience of Thomas Street's planned public realm. Each bollard is a self-contained entity, inseparable from the surrounding space.

Since the earliest jostle stones to more recent plastic forms, bollards are expressive of a relationship between people, places and memories. The older examples are not relics, disconnected from the present – they act as storytelling aids reducing the distance between past and present. Thomas Street's ancient history means it has a very specific bollard-scape. However I propose that this interpretive design history of bollards could conceivably applied in other cities to explore the richness of the identity of that location.

Lefebvre says that approaching space 'as an object of science gave it an neutral character. Space passes as being innocent or, in other words, as not being political.' (2009, p. 169). Thomas Street as a space is not neutral, innocent or non-political. It has been constructed by countless people and been shaped by numerous influences over hundreds of years. It has seen executions, demolitions and protests:

Our most successful environments are not those which are totally of one era, but rather those which had grown over the ages, conserving within their use details and elements from all stages of their history. Such places constantly enrich themselves through the acquisition of new elements. (O'Connell, 1975, p. 9)

We are influenced by the public spaces we create around us and live within. Shared space is not a panacea (Luca, et al., 2012, p. 60), nor is inclusive design. Through its haphazard planning history, the experience of the public realm of Thomas Street is far from cohesive, yet ultimately it is one of integration. Beyond their aesthetic value, or

lack of, the bollards of Thomas Street present a portrait of the street itself. Everything and anything can find its place here. And therefore everyone and anyone can fit in. It is at once welcoming and distracting, encouraging and challenging.

Although bollards may exist from a compulsion to conquer space and control the public realm, as a collective body their 'visual anarchy' (Herring, 2016, p. 170) on Thomas Street resists order and uniformity. I would have also liked to include much more about uniformity. What if all streets were experienced in the same way? What if all Dubliners looked the same? I refrained from extending the discussion on uniformity in urban culture as this would have involved a more thorough exploration than this case study could allow.

As the evolution of urban planning continues, what of the evolution of bollard design? Millet (1972, p. 124) argued 'the appearance must stem naturally from the more general considerations of function'. Unless Thomas Street's cellars are filled in to adhere to road carriage standards, the functional need for bollards will persist at street level (interview with Siobhan Maher via phone, 8 May 2018). If bollards offer us a 'live experience of history' (O'Connell, 1975, p. 9), then how might we, with imagination and initiative, consciously add to this expanding body for others to experience 'live' in the future?

Will heritage bollards be reinstated, similar to the lighting programme completed by Dublin City Council?²⁶ Will we continue to repurpose bollards for other uses, such as the Dublin bollard seat prototype?²⁷ Or will 'smart bollards' become widespread, like the award-winning responsive street furniture?²⁸

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²⁶ The 2017 End of Year Progress Report for the Liberties Business Forum reported the completion of a €300,000 heritage lighting programme on Thomas Street and James Street, replacing 60 columns along the route (p. 10). This was done as part of the 2009 *Liberties Local Area Plan* which pledged to 'reinstate heritage features such as cobbled streets, Victorian lamp posts and bollards' (p. 69).

²⁷ A 2012 student design project in conjunction with Dublin City Council and Dublin Institute of Technology that produced a concept for a bollard seat can be attached to existing bollards (Institute Without Boundaries).

²⁸ Winner of Fast Company's 2015 Innovation By Design Award in the category of City Solutions: 'This system centers around using smart technology to make streets easier to use for disabled people with different kinds of impairments. It borrows the principle of responsive web design—the ability of a website to reconfigure to the need of individual users—and applies this to the physical environment. People can register their smartphones and request services that go into effect when they pass the responsive furniture, like brighter street lighting, extra spaces to sit, audio information, and longer intervals for crosswalk signals. Once users set up with the system, the responsive items will perform services according to their profile without requiring any further direct action.' (Budds, 2015). See also http://www.rossatkin.com/wp/?portfolio=responsive-street-furniture.

Herring argues 'it is in its minor equipment and detail that an age reveals its character' (2016, p. 31) – so what do the bollards say about the character of Thomas Street today? In the words of Jack Teeling, co-founder of the nearby Teelings Distillery, 'The Liberties is not a generic offering' (Woods, 3rd May 2017), and nor is its high street. Analysing the bollards along the street is complex because Thomas Street's identity is complex. The miscellany covered on the tour is materially distinctive to Thomas Street. As the high street of the Liberties, it is a vernacular space and as such, Thomas Street can only be grasped through its curated environment, the urban ordinary.

'Sitting on bollards and weeping leads nowhere.'

Jack B. Yeats²⁹

²⁹ As quoted by C. P. Curran in a lecture given at the Contemporary Painters' Gallery (1941, p. 89).

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APPENDIX A Catalogue of bollards and jostle stones on Thomas Street

South side: From Francis Street to Meath Street							
1	Torpedo	Heavy duty steel	Black with white reflective band	Jedward stickers			
2	Torpedo	Heavy duty steel	Black with white reflective band	Black and white Jedward stickers			
3	Gas lamp base	Cast iron	Grey	Embossed Strong & Sons			
South side: From Meath Street to Thomas Court							
4	Fluted	Cast iron	Black				
5	Fluted	Cast iron	Black	Branded Furnitubes (brochure ref: Doric)			
6	Jostle stone	Stone set into cobble stones		At entrance to St. Catherine's Lane West			
7	Torpedo	Heavy duty steel	Grey	Rusting			
8	Hexagonal	Granite					
9	Hexagonal	Granite					
10	Hexagonal	Granite					
11	Hexagonal	Granite					
12	Hexagonal	Granite					
13	Fluted	Cast iron	Black	Branded Furnitubes (brochure ref: Doric)			
14	Fluted	Cast iron	Black	(erecitare reni Bene)			
15	Fluted	Cast iron	Black	Along Thomas Court			
16	Fluted	Cast iron	Black	Along Thomas Court			
17	Fluted	Cast iron	Black	Along Thomas Court			
18	Fluted	Cast iron	Black	Along Thomas Court			
19	Fluted	Cast iron	Black	Along Thomas Court			
20	Fluted	Cast iron	Black	Along Thomas Court			

21	Fluted	Cast iron	Black	Along Thomas Court				
South side: From Thomas Court to St. James' Gate								
22	Fluted	Cast iron	Black					
23	Fluted	Cast iron	Black					
24	Fluted	Cast iron	Black with painted gold fluting					
25	Fluted	Cast iron	Black with painted gold fluting					
26	Jostle stone	Stone set into paving		One of a pair at St. James' Gate				
Nor	North side: From Watling Street to Bridgefoot Street							
27	Fluted	Cast iron	Black					
28	Fluted	Cast iron	Black					
29	Fluted	Cast iron	Black					
30	Fluted	Cast iron	Black					
31	Fluted	Cast iron	Black					
32	Fluted	Cast iron	Black					
33	Fluted	Cast iron	Black					
34	Fluted	Cast iron	Black					
35	Fluted	Cast iron	Black					
36	Canon jostle	Cast iron	Black	Outside IAWS				
37	Canon	Cast iron	Black	Outside IAWS				
38	Fluted	Cast iron	Black					
39	Fluted	Cast iron	Black	Open top, with litter inside				
40	Fluted	Cast iron	Black					
41	Fluted	Cast iron	Black	Branded Furnitubes (brochure ref: Doric)				
42	Fluted	Cast iron	Black	Branded Furnitubes (brochure ref: Doric)				

43	Fluted	Cast iron	Black					
44	Fluted	Cast iron	Black	Branded Furnitubes (brochure ref: Doric)				
45	Torpedo	Heavy duty steel	Black with white reflective band					
46	Torpedo	Heavy duty steel	Black with white reflective band					
Nor	North side: From Bridgefoot Street to John's Lane West							
47	Traffic bollard	Plastic	White, blue circle, yellow rectangle	Installed with a base light				
48	Fluted	Cast iron	Black					
49	Fluted	Cast iron	Black					
50	Fluted	Cast iron	Black					
51	Fluted	Cast iron	Black					
52	Fluted	Cast iron	Black					
53	Fluted	Cast iron	Black with a silver reflective band					
54	Fluted	Cast iron	Black with a silver reflective band					
55	Lighthouse jostle	Cast iron	Black	Outside former firehouse (now NCAD)				
56	Lighthouse jostle	Cast iron	Black	Outside former firehouse (now NCAD)				
57	Jostle stone	Stone set into paving	45cm tall x 25cm wide	Main gate NCAD				
Nor		•	t to St. Augustine Stre	eet				
58	Fluted	Cast iron	Black					
59	Fluted	Cast iron	Black	Branded Furnitubes (brochure ref: Doric)				
60	Fluted	Cast iron	Black	(Signification 2011)				
61	Fluted	Cast iron	Black					
62	Fluted	Cast iron	Black	Branded Furnitubes (brochure ref: Doric)				
63	Fluted	Cast iron	Black	, , , , , , , , , , , , , , , , , , , ,				
64	Fluted	Cast iron	Black					

APPENDIX B

Photographic references for bollards and jostle stones, as listed in Appendix A

Black and white torpedo



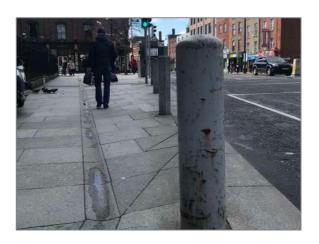
Gas lamp base



Fluted with Furnitubes branding detail



Grey torpedo



Fluted



Fluted with reflective band



Hexagonal



Jostle stone at St. Catherine's Lane



Canon jostle at IAWS



Traffic bollard



Jostle stone at NCAD (main entrance)



Lighthouse jostle at NCAD (firestation)



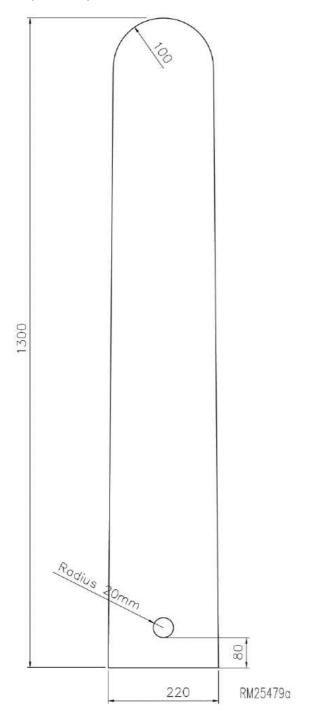
Photo credit: Majekodunmi, 2018.

APPENDIX C Dublin City Council Construction Standards for Bollards

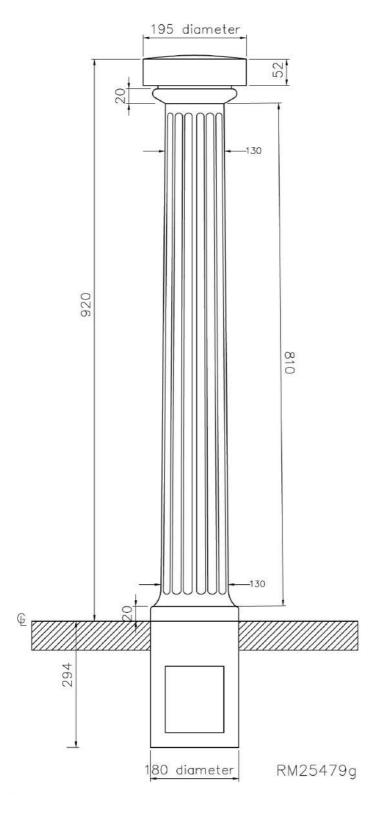
Specifications and text taken from:

Construction Standards for Road and Street Works in Dublin City Council (2016)

Torpedo Style Bollard



'Heavy duty steel round bollard 1300mm in length and 220mm wide.' (p.100) Fluted Bollard



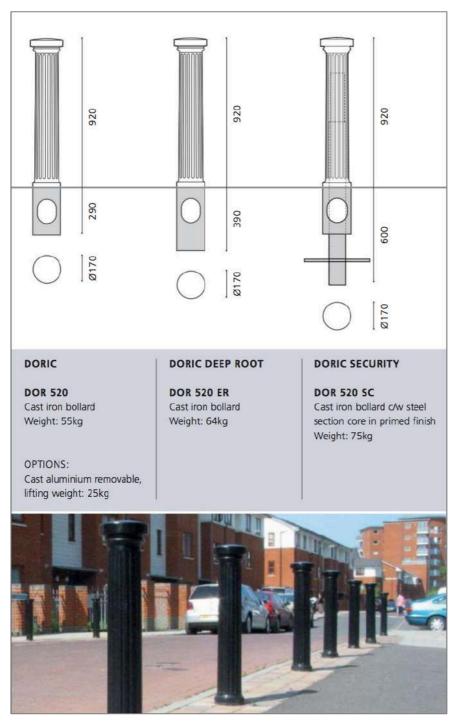
'Medium / heavy duty cast iron round fluted bollard, 1210mm in length and 180mm wide. The fluted bollard stands 937mm above ground level. The bollard is fixed 294mm into a concrete foundation Dimensions of foundations depend on ground conditions. Standard pain finish is to be 1 BS colour in two-pack acrylic.' (p.101)

APPENDIX D

Product Specifications for Furnitubes' 'Doric' Range

Specifications and text taken from: *eBrochure – Cast Iron Bollard Range Ref: E-008-08-17* (Furnitubes, n.d.)

'Cast iron bollards are manufactured using traditional founding techniques, giving a distinctive surface finish derived from the sand face of the moulds.' (p. 3)



(p. 6)

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