

The Liffey and a bridge too far: Bridge-building and governance in Dublin 1870-1960

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There are currently 23 bridges over the Liffey westwards from Lucan but only five of them were built east of O'Connell Bridge since 1850 and one is a pedestrian only bridge. This was despite a pressing need for a better system of traffic circulation that was obvious from the middle of the nineteenth century as the city and its docklands continued their eastwards expansion. That need was recognised by the civic authorities but the complex system of local governance with overlapping responsibilities ensured that satisfactory solutions were difficult to achieve. There were issues of power, of funding and of taxation as well as competing needs. Even the naming of bridges could not be easily accomplished. This paper examines the issue of bridge provision from 1880, the year that the widened Carlisle Bridge was reopened as O'Connell Bridge. The main focus of attention will be the initial building of Butt Bridge, its subsequent rebuilding and the intractable problem of building a bridge to the east of Butt Bridge. A novel solution in the form of a transporter bridge was proposed, which would have added a distinctive element to the city's streetscape but nothing was accomplished in the thirty years to 1960.

The city of Dublin during the period 1930-1950 has not been widely studied. Using a variety of sources, newspapers, civic minutes, Oireachtas debates, maps, photographs and graphics, this paper aims to shed light on one important aspect of civic governance and to show how the city might have been transformed had matters been handled in a different way.

Keywords: Dublin, governance, Butt Bridge, transporter bridge.

Cities and Rivers

If people can quote any part of Joyce's *Finnegan's Wake*, it is likely to be the description of the Liffey that begins and ends the book: 'riverrun, past Eve and Adam's, from swerve of shore to bend of bay, brings us by a commodius vicus of

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recirculation back to Howth Castle and Environs' (Joyce 1939). It is the riverrun of Anna Livia Plurabelle that gives definition to the city. The Liffey has always been a central part of the story of Dublin because of its origins as a fording place on the major Irish routeways and because the Danish Vikings appreciated it for its ease of travel as well as for the useful defensive site which they found on its right bank at the Black Pool. It was the river that allowed the later Hiberno-Norse to develop their city into an important trading node in the Norse world. Indeed it has long been noted that some cities managed to derive great wealth from their use of rivers. Braun and Hogenberg in their hugely important atlas of cities, *Civitas Orbis Terrarum*, Volume 1 of which was published in 1572, attribute the wealth of Lyons to 'the aforementioned rivers, for they pass many towns and flow into the sea, and because the city stands in the centre of Europe and is counted the heart of France, such rivers are a good means of conveying all things out of and into all the chief countries of Europe'.

The river Liffey has played a key role in the development of Dublin but it has proved difficult to bridge in an efficient manner. Despite general recognition that there were serious traffic issues in the city, which needed to be addressed by additional bridges, the complexity of governance in the city conspired to ensure that bridge building was a long, drawn out process. The focus will be on Butt Bridge and on the attempts to provide a bridge further to the east; attempts which took half a century to bring to fruition.

While rivers may have provided great potential for conveying goods along them, the price had to be paid in transporting goods across them. As Kostov (1992) has noted, many river towns stayed put on one bank and Cologne, for example, did not cross to the other bank until modern times because the river was too wide. He further argues that the instance of a city growing on both banks of the river is rare and requires, as he puts it, 'special pleading'. He suggests that the reasons that Prague developed on both sides of the Vltava was that the ridge on the left bank provided the necessary protection for the Hradčany while the flat ground on the right bank was more suited to the burgher town of the Staré Město. Rather he suggested that during the middle ages, the most common form of town was that of the ville-point or bridge city. This was where the main city was built on one bank while a bridge or bridges led to another but smaller settlement, independently, walled on the other bank. Dublin, as depicted by John Speed in 1610, would seem to fit this description very well. Speed shows a small but self-contained town on the right bank of the Liffey with a bridge leading to the far less developed left bank, where there was a much more dispersed settlement pattern with the separately walled St Mary's Abbey being the dominant feature.

It was the presence of St Mary's Abbey and other religious properties on the left bank that provided the catalyst for the city to embrace its north side. After the dissolution of the monasteries under Henry VIII (see Dickson 2013), the lands eventually found their way into the hands of speculators such as Humphrey Jervis and Luke Gardiner who capitalised upon the improved economic and political environment that followed the restoration of royal English power in 1666 and the

return to Dublin of the viceroy, the Duke of Ormonde (Sheridan 2001). They built their houses on the north side of the city and turned that part into the fashionable quarter, with Sackville Mall becoming a place of resort and promenade. The attractiveness of this location was further enhanced by the development of the pleasure gardens as a revenue generating mechanism for the Rotunda Hospital (Boyd 2005). Dubliners now needed to be able to cross the river on a regular basis if they were to be fully engaged in the social life of the city. As the Gardiners developed their estate, the fashionable residential areas also moved to the east, paralleled by a similar eastward movement promoted and facilitated by the Fitzwilliams on the south side. This required more bridging points and had the potential to bring the residential city into conflict with the commercial city.

Dublin was a port and, as Kostov has also noted, ‘to the extent that a river is a working watercourse with a port, there is a definite conflict between those who make use of it for trade related activities and those who would turn it into a work of art’ (p.41). This is, in the main, true of Dublin. The Liffey banks are home to two of the finest buildings in the city – the Four Courts and the Custom House – but the needs of the port dominated and the city quays were functional rather than beautiful. It was fortunate that the changing nature of shipping and dockland management also pushed Dublin to the east as it sought deeper water and more extensive land. As the docks moved to the east, so the city centre was able to grow and the needs of the two sectors seemed reasonably well accommodated. The *Illustrated London News* panorama of the city for 1846 shows ships berthed right up to Carlisle Bridge; the business of the port interacted closely with the other business of the city. While its bridges were a means to improve the commerce of the city at the expense of its quay space, the city never sought to exploit the real estate that bridges offered. Girouard (1985) has noted that it was common to lease bridge space to shops in many European cities but this was never a feature in Dublin, with the exception of a recent and unsuccessful experience on Grattan (Essex) bridge.

Questions of Governance

Nonetheless, the question as to where the city ended and the docks began had to be approached in a rational manner. The need to manage the port, and especially to ensure effective taxation, led the Corporation to establish a Ballast Office in 1708 and this was to prove the basis for the current Dublin Port Company. This was a committee of fourteen prominent citizens and it reported to the lower house of the Corporation, the Commons. While the committee undertook good work, including the construction of the Great South Wall it was not felt to be efficient by many. This led, in 1786, to the introduction of a bill in the House of Commons, College Green, by William Beresford, which had the effect of creating a separate corporation. ‘The Corporation for Preserving and Improving the Port of Dublin’, known commonly as the Ballast Office, removed direct, but not complete, control of the port from the Corporation. The ex-officio membership of the Lord Mayor and the two sheriffs, together with three aldermen, gave the Corporation

six representatives but there were seventeen other members from business and shipping interests.

This Ballast Board did not report to the Corporation and so was another element of governance in the city which as the nineteenth century progressed came to comprise not only the Dublin Corporation, the Ballast Board but also the mushrooming independent townships on the edge of the city. The Ballast Board was, in turn, replaced by the Dublin Port and Docks Board in 1867. The opportunity was taken to reform the membership to reduce the self-perpetuating oligarchical nature of the Board. The Corporation would now be represented by the Lord Mayor and three citizens (not necessarily members of the council) while the interests of traders and manufacturers, and ship owners were to be managed by seven members each, elected from each group. The newly independent Commissioners of Irish Lights also nominated seven members.

There had been a division of responsibility between the Dublin Corporation and the Ballast Board and this continued under the new arrangements. The 1786 Act and later statutes gave the Ballast Office responsibility for repairing and rebuilding all of the quays from Barrack (Rory O'Moore) Bridge to Sutton on the north city and Dalkey on the south side. By an 1811 Act, they were given responsibility for all of the bridges over the Liffey at that time or which might be erected (Gilligan 1988). Since the quays upstream of the most easterly bridge could not be used for shipping, a compensatory tax was levied on the city and county and this proved to be a perennial problem. Following the completion of Carlisle Bridge in 1794, the tax was levied on all of the quays to the west while the Ballast Office had responsibility for everything seaward of this point.

The spheres of influence of the two authorities therefore overlapped to a considerable degree and a high level of co-operation was needed. This overlap increased as the port began to develop extensively on the left bank and it became the main focus of shipping (Gilligan 1988). The city now had a significant north and south side footprint and the Liffey was now a major barrier as well as a major routeway. The northside dock development, which was further enhanced during the nineteenth century, generated significant cross-river volumes of traffic because of the location of the main commercial and industrial foci of the city on the right bank. The flows thus generated were complex and not facilitated particularly well by the road system. The problems were recognised within about twenty years of the completion of Carlisle Bridge but they defied solution for over a century. This paper examines how the city sought to improve its circulation systems by building bridges from the latter years of the nineteenth century to the middle of the twentieth century. While the story of the projects are of interest in themselves, they also highlight the effect that this fractured governance had on the process.

Carlisle Bridge and the Swivel Bridge

The push for a bridge to the east of Carlisle Bridge developed in the 1870s at about the same time when, after years of complaints, it was decided finally to widen Carlisle Bridge. This had proved to be a very difficult project and the entire

decade of the 1860s and more passed without the necessary funding being found, although this was only part of the problem. The project was delayed further as Dublin Corporation and the Port and Docks Board moved the project through their various processes, with more than a little shuttling between them. Indeed, not everyone was of the opinion that Carlisle Bridge needed to be widened. From time to time, letters appeared in the press which questioned the expense. One such letter in the *Irish Times* from 1868 put the problem down to a lack of order in the traffic on the bridge. 'A ratepayer' noted that on a recent visit to London, he had seen great volumes of traffic pass over London Bridge without issue. In comparison to Dublin, 'no confusion, stoppage or accident ever takes place on the one, whilst on the other every day witnesses some crash or incident requiring the intervention of the police' (*Irish Times*, 29 September 1868, p.4). Another correspondent, this time writing in 1875, was of the view that he would be happy to see the old bridge taken down and a new one put in its place as long as it did not cost the Corporation one shilling. He was of the view that the 'over taxed citizens cannot afford to pay for ornamenting the city while useful works are ignored' (*Irish Times*, 17 May 1875, p.2). One of the necessary works to which the writer might have been referring was the need for a new sewerage system. Sewers emptied directly into the Liffey, producing a stench at low tide, which was stifling. Indeed, there was wry laughter when one councillor worried that the vistas up and down the Liffey might be cut off if a bridge with shops replaced the old Carlisle Bridge. Nobody with a sense of smell would linger on the bridge from spring onwards.

This from the *Irish Times* (10 August 1859, p.2) captured the circumstance most vividly.

For twelve hours out of the twenty four a large portion of the bottom of the Liffey is exposed. The sun plays upon the festering mass by day; the malaria hangs about it like a cloud by night. It is black, ... noisome, pestilential; more like a gigantic sewer than that sparkling river which glitters among the trees ten miles away. Every summer sends abroad the fever laden breath of the river; every summer our corporate magnates meet and solemnly discuss the evil and the remedy. All sorts of proposals are made but never a one accepted.

Over fifteen years later and the problem remained as it had been.

YESTERDAY at five o'clock, p m, the tide in the River Liffey was out; and the horrible banks of fermenting sewage called 'foreshores,' were covered with bursting bubbles of malaria. A yellowish slime floated about the edges, and seemed to be alive with wriggling things. A vapour as of steam was plainly visible rising up in tongues and melting away in a grey mist over the quay walls into the shops and markets. The stench was really unbearable (*Irish Times*, 4 May 1875, p.5).

However, widening the bridge seemed easier to deal with and the project moved forward, if at a glacial pace. Though the Corporation was aware that the prerogative over the bridge renovation rested with the Port and Docks Board, this did not prevent them from having their own design produced for a new bridge, especially as it was seen by them to be more parsimonious. A deputation attended the Port and Docks Board on 26 August 1875 and put before them the design by Mr Turner for a remodelled Carlisle Bridge rather than a new one. The expense of the project was the reason for the remodelling and it was suggested that it could be delivered for £34,000. There was a hint of a threat in the Corporation's presentation in that it was suggested that the Courts would not support any expenditure which went beyond what was needed. The Board for its part reiterated its position that a stone bridge was needed and that this would cost £74-80,000. There was a discussion for more than an hour which the *Irish Times* (27 August 1875, p.6) described as 'very animated'. The Port and Docks Board considered the matter and sent the resolutions that they had passed to Dublin Corporation. These were duly considered at a meeting on 14 August and, as they were not universally liked, the Corporation decided to refer them to a committee of the whole house for further consideration. One can appreciate the sentiment of Alderman Campbell who said that he hoped to live long enough to see Carlisle Bridge completed but he greatly feared that he would not if they went on this way (*Irish Times*, 19 August 1876, p.5).

Running through these, what must have seemed interminable, discussions was the suggestion that an additional bridge was also needed to the east of Carlisle Bridge. It was commonly believed that the Port and Docks Board was against such a bridge because of the loss of berthage but they stated at the above meeting that they were already considering such a project. Surprisingly, given how long the Carlisle Bridge project had taken, the decision to build a new bridge to the east was taken very quickly and put into execution even more so. It was included in the legislation necessary to secure the widening of Carlisle Bridge in 1876.

The reasons for the new bridge were not hard to determine and they were due to the continuing development of the left bank of the river for commerce: the 'trade side of the city' as one commentator put it. The Custom House docks had been improved and there had been significant investment in warehousing. The Midland Great Western Railway had moved its goods terminus to the North Wall from Broadstone and the other railway companies, the Great Southern and Western, the Northern, and the London and North Western were in the process of doing the same. However, the right bank had not been neglected and there had been investment there also in both manufacturing and warehousing. The business of the port meant that bulky and heavy cargoes of grain, timber and coal had to traverse Carlisle Bridge. In fact, much of the internal traffic of the port had to go up the quays to Carlisle Bridge so that it could go down the other side. To this was added the complaint that since much of the prime residential area of the city was to the east of Carlisle Bridge, it was an inconvenience for those residents to have to travel so far to the west to cross the Liffey. This was an odd argument since it

was unclear what would take them into the docklands. Nonetheless, it was often made by the Chamber of Commerce (see *Irish Times*, 7 June 1875, p.2).

The flows of traffic were now very significant as figures showed from a census of traffic undertaken in 1860 by the Metropolitan Police, at the behest of the then Ballast Board. The survey was taken over three days from 7-10 March between the hours of 9am and 7pm and they indicated that 9,779, 10,426, 10,419 and 10,869 vehicles respectively passed over Carlisle Bridge; an average of 10,374 vehicles. Of this, about one quarter comprised traffic from the quays. To this had to be added the traffic flowing from the quays which passed by the bridge but did not cross it. This gave a daily average of 17,000, which was not greatly below that flowing over London Bridge. This problem was set to become more difficult as the volume of traffic not only increased but the advent of motorised traffic created new demands as slower horse-drawn traffic slowed up the motor vehicles and reduced their efficiency (Figure 1).



Figure 1. Traffic on Carlisle Bridge before its widening. *Harper's Weekly*, 24 August 1878, p.676.

Why a swivel bridge?

There seems to have been very little debate or discussion as to whether a fixed bridge or a swivel bridge should have been built. It was generally assumed that the berthage between Carlisle Bridge and the new bridge along Eden and Burgh Quays was valuable and could not be lost in the construction of a new bridge. Against that, a swivel bridge was going to be narrower than a fixed bridge because of the need to accommodate the swivel and to provide a sufficiently wide channel. It meant that the bridge could only accommodate one lane of traffic in each direction, something that was shown to be woefully inadequate almost immediately

(Figure 2). There was also debate at the time about a connection between the various railway stations that would cross the Liffey. Granted, at the time of the decision to build the swivel bridge, these discussions were focused on a number of solutions and the Loop Line bridge as it developed was only one such possibility. However, it seems that the possibility of the swivel bridge having to become a fixed bridge was in Blood Stoney's mind when he designed the bridge. Indeed, it was one of the arguments put when it came to deciding how to widen the bridge in the early 1930s (see *Irish Times*, 23 November 1928, p.11). The Port and Docks Board was also accused of sharp practice during the passage of the legislation through the Commons by trying to pass onto Dublin Corporation an annual charge of £400 arising from the fact that the bridge would be closed for most of the time and thus the costs of the quays should fall to the Corporation.



Figure 2. An early view of the swivel bridge. *The album of views, Dublin & Suburbs with Wicklow*, Charles Reynolds and Co, nd.

The swivel bridge was designed by Mr Bindon Blood Stoney, the chief engineer of the Port and Docks Board. The bridge was made of iron and impressed the engineering fraternity. It was 120 feet long (37m), 20 feet (6m) wide with footways of 6 feet (2m) in width. These latter were unusually outside the main enclosure of the bridge. The bridge could not hope to do its job without the provision of improved access routes. The quays were relatively narrow and it would have been quite difficult for horse-drawn traffic to make the 90-degree turn necessary to get onto the bridge. The creation of Tara Street was a necessary element in the plan and here the Corporation moved relatively swiftly, given that the swivel bridge idea had been a reality for only five years. It took until 1884 before the new street was ready but given the complexity involved in acquiring property this was reasonable, though not speedy.

Tara Street

There had been a passageway there before, as can be seen on Rocque's 1756 map but George's Street was narrow and irregular, particularly at the junction of Lazer's Hill. Due to the development of Great Brunswick Street, the west-east access south of the river had improved by the time the swivel bridge was built. Nonetheless, access to the quays had changed little by the 1850s, (see Figure 3) except that George's Street was now differentiated from the narrower Shoe Lane and the pedestrian-only Fleet Market. An access route to George's Quay had been planned as part of the Dublin Improvement Bill (1876), but as this failed to get approval in Parliament, access had to wait until the swivel bridge was built. The area was in drastic need of redevelopment and it was regarded as one of the worst purlieus in the city. In order to achieve the 50 foot (15m) width of the new street, most of the houses had to be demolished, except for a few properties on the east of George's Street. Tara Street was opened on 17 April 1884 with all of the pomp of a Corporation well pleased with its work. The redevelopment had opened up a site, which the Corporation reserved for a new public baths and the Tara Street Baths opened the following year.

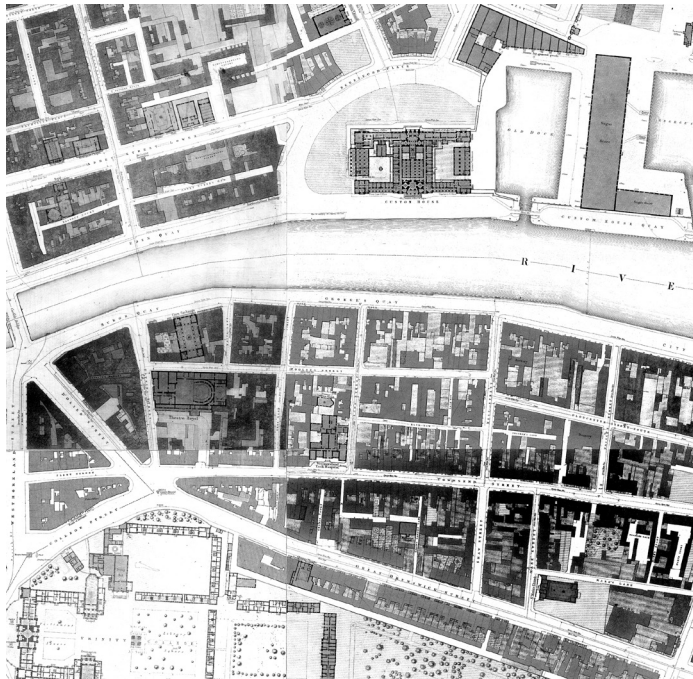


Figure 3. The area to the south of George's Quay in 1851. The map is a composite from the Ordnance Survey 5-foot plans of 1847 and is drawn from sheets 14, 15, 21 and 22.

Tara Street was the first significant street development since the 1849 local government reforms when Dublin Corporation took over the roles of the Wide Streets Commissioners and the Paving Board, following the Dublin Improvement Act (C97, 12 & 13 Victoriae). Soon after, on 27 July 1886, Lord Edward Street was formally opened. This street was designed to improve west-east communication on the western edge of the city, enabling traffic to flow down Dame Street and, making use of the new Tara Street, to reach the north-eastern part of the city without going near Carlisle Bridge. It seemed that a solution to moving Dublin's traffic had been found and it also seemed to demonstrate that both Port and Docks Board and Corporation could work well together and even do so in a quick and efficient manner.

While each party tended not to be shy in asserting their rights, it seems that each could see that there were times to be quiet. There had been differences of opinion on who had naming rights on bridges. The Port and Docks Board claimed the legal right but Dublin Corporation also felt that it had oversight on the names allocated in the city. Carlisle Bridge had been successfully renamed O'Connell Bridge in 1880 with a minimum of argument between the two bodies. This time, however, neither body got the opportunity to name the bridge and each stayed well away from the issue. On 26 August 1879, the *Irish Times* reported on the expected opening of the swivel bridge, the formal handover from the contractor Mr W.J. Doherty (Dougherty) to the Port and Docks Board having been accomplished earlier in the day. He too had reason to be pleased as he had brought in both the Carlisle Bridge and swivel bridge projects on time and he had managed the rebuilding of Carlisle Bridge without the need to close it. The newspaper was confident that the bridge would be named 'Beresford' and it suggested that it would be a 'graceful complement' (p.5) to honour Lord William who had distinguished himself in Zululand. However, the naming of the bridge did not go according to plan, if such was the plan. At the opening, a large sign (placard) was displayed calling for the public to assemble and name the bridge after the late Mr [Sir Isaac] Butt (*Irish Times*, 27 August 1879, p.5), although according to the newspaper, no naming ceremony took place. The paper did note that once the official ceremony had ended that the bridge was taken over by a large number of roughs who engaged in some horseplay. The *Freeman's Journal* (26 August 1879, p.5) had expressed a contrary view when its editorial proclaimed that it 'was a scandal and disgrace to this metropolis that her great squares and streets and bridges perpetrate the names of the stranger, the oppressor, or the foe... We know of only one Beresford whose name is associated with the history of Dublin and that is the blood-stained tyrant who ordered and gloated over the tortures of '98'. It went on in that vein for some paragraphs and finished with the belief that the authorities would never let the bridge be named after Beresford. Against that background it is perhaps not surprising that there was no naming ceremony. The matter rumbled into September with various names being suggested such as 'Gandon' or even 'Swivel'. In fact, it stayed as the 'swivel bridge' for some time and was still that when Tara Street was opened on 17 April 1884. In the same year

though, the name 'Butt Bridge' was affixed to the structure and it was certainly being called 'Butt Bridge' in 1886 in official circles.

The swivel bridge proved popular and useful. The report of the Chairman of the Public Health Committee, E.D. Gray, to the lord mayor noted that between Monday 27 October and Saturday 8 November 1879, some 38,000 vehicles, 7,500 pedestrians, 700 'equestrians' and 2,800 cattle passed over the bridge (*Irish Times*, 18 April 1884, p.6). Despite this, the traffic flows did not improve. All that happened was that the location of the jams moved. The swivel bridge soon became the locus of the problem: it was too narrow and its single carriageway was easily held up by slow moving traffic. Almost immediately, there were calls for its widening.

Now, this was where issues of governance came into play again. Any project to widen the bridge had to be undertaken by the Port and Docks Board: matters relating to the bridge came under its jurisdiction. However, they had the power to levy the various councils, including the townships, the self-governing suburbs of the city (see Ó Maitiú, 2003), for a proportion of the cost or, at least, they believed that they had such a power. The councils, for their part, while they accepted that they had a responsibility to contribute to the cost, did not feel that their sole role was to write the cheque. If they had to pay, then they wanted a say in what was being paid for and they were quite prepared to be parsimonious. The spirit of co-operation, which had been visible fleetingly during the construction of the bridge, now retreated.

Dealing with the bridge was not centre stage during the 1890s as Dublin Corporation struggled with its attempts to absorb the townships. While this was mainly about getting their rate books, it would have had the beneficial effect of greatly simplifying the governance of the city (see Daly 1984, Ó Maitiú 1997). The entire built-up area would have come under the control of one body. Nonetheless, there were regular calls both from members of the public and official bodies for the issue to be addressed. These became all the more strident when it became necessary to close the bridge regularly for repairs, sometimes for up to two weeks at a time. A letter to the *Irish Times* from Patrick Keaveney captured the sentiments quite well. He wrote that:

Two thirds of the heavy traffic from the North to the South side of the city, and vice versa, passes over this 'misnamed' bridge, and at all times of the day the congestion is terrible and dangerous. Assuredly, the borrowing powers of our 'City Mothers' is not yet exhausted, and they ought to be able to raise a loan for the purpose of substituting for the present extra-ordinary structure a wide and substantial bridge. It need not be ornamental, for the 'loop line' overhead bridge, which crosses the Liffey here, has knocked the bottom out of aesthetics, as far as this portion of the city is concerned (*Irish Times*, 29 April 1907, p.8).

The Port and Docks Board decided eventually that the demands could be resisted no longer and that the bridge problem needed to be addressed. They came up with what they believed was a cunning plan which would be timely and efficient. This was to levy a bridge tax on the councils to pay for the project. They believed that they had the power to levy such a tax under the legislation passed in 1854 and 1876, the latter at the time of the widening of Carlisle Bridge and the original building of the swivel bridge. It might have been a clever move since it avoided the need for new legislation and the councils' requirement to supply the care and maintenance of the quays and bridges was well established. Unfortunately, the councils did not like the idea of being taxed in this manner and it fell to Dublin County Council to take the case against the Port and Docks Board. It was described in court as a friendly dispute designed only to clarify the law. This means, of course, that it was exactly the opposite. The argument was that while there was a responsibility on the councils to pay for the maintenance and repair of bridges, what was being proposed by the Port and Docks Board was a reconstruction and therefore not covered by the legislative powers that the Board had. The case would have been unnecessary if the councils had wanted the bridge to be rebuilt; they simply could have stayed quiet and played along with the Port and Docks Board. It would have been a simpler solution than going the legislative route, even if they were all in agreement, because that route would inevitably have involved the Board of Trade and they had their own viewpoint on how money should be spent. It seems that the cost, estimated at between £23,000 and £25,000, was too much for the parties to contemplate. The case worked its way through to the Court of Appeal and on 11 May 1915, the Lord Chancellor issued a judgment, with which his colleagues concurred, that stated that the Board could not levy a tax for what was a reconstruction rather than repairs. This left legislation as the only route and that was not attractive.

Indeed, while the Port and Docks Board recognised the need for action on the bridge they decided to drop a clause relating to the reconstruction of Butt Bridge from their proposed Port and Docks Bill 1920 because the Law Adviser suggested that it was not wise to make such a provision when agreement had not been obtained between the Port and Docks Board, Dublin Corporation and Dublin County Council. If such agreement was forthcoming in the future, then a provision could easily be included and it would be supported within government circles (*Irish Times*, 13 November 1919, p.3).

Independence and a new attempt

It had long been recognised that the governance arrangements for the city of Dublin were incoherent. So, when independence had been achieved, thoughts turned again to the reorganisation of governance in Dublin. The analysis undertaken by the Greater Dublin Commission of Inquiry in 1926 was good and their recommendations were sensible. Dublin was to be extended by the annexation of Rathmines and Pembroke, but also by the addition of Howth and some rural areas. A single 'coastal borough' was to be formed by the amalgamation of Dún

Laoghaire, Blackrock, Dalkey and Killiney with a significant rural element. Common services were to be administered by a Great Council in both the new county borough and the expanded coastal borough with local councils to deal with local services. Unfortunately the 'great council' idea came to nothing, though Pembroke and Rathmines finally joined the city in 1930, and so it fell to the same actors as before to address the question of Dublin's circulation system and the question of bridges. By 1925, all had seen the Civic Survey of 1925 and its map of traffic circulation and pinch points and once more the question of Butt Bridge was set to be addressed.

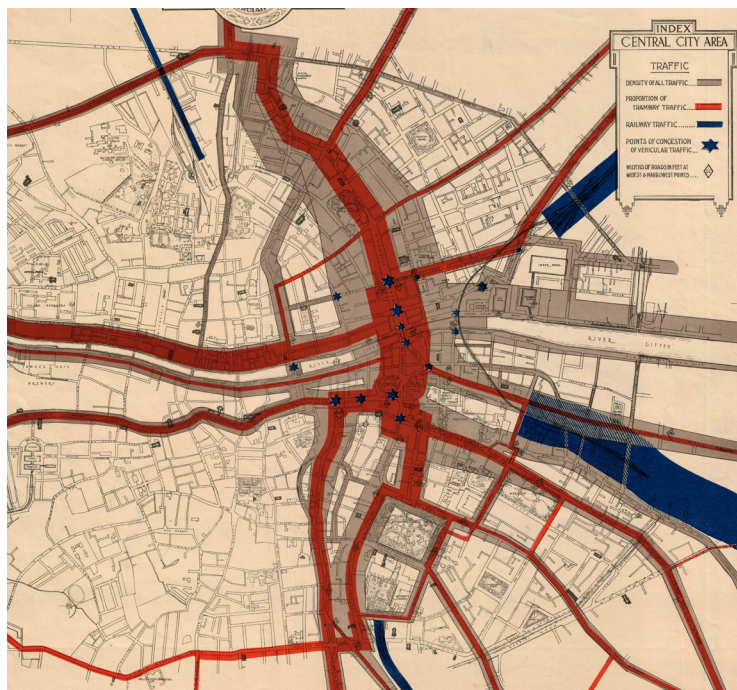


Figure 4. Extract from Civic Survey plan showing the points of congestion in the city centre. *Civic Survey 1925*, Civics Institute.

Chapter VII of the Civic Survey (1925) was devoted to traffic. In the course of the discussion, it noted that 'Dublin [was] approaching a period of serious traffic congestion' (p.119). It was further remarked that there were approximately 5,000 motor cars registered in the city in 1914 compared with 11,315 in 1923 and that, on the basis of comparison with other cities, there was probably the same amount of horse-drawn transport. Much of this traffic was heading for Butt Bridge and the map accompanying the Civic Survey confirmed that it was time to address the problem. It identified the axis from Westmoreland Street through to O'Connell Street as bearing the greatest flows in the city. Just about every junction was a problem area and the criss-crossing of flows on O'Connell Bridge added to the

chaos. What might surprise was their view that the biggest problem for the city, however, was the tram system. Despite their carrying capacity, trams were large, slow moving and stopped regularly. Other traffic built up behind trams and the stop-start nature of much of it ensured that annoyance was the outcome for many. Furthermore, there was a problem with the geography of the tram lines. Nelson Pillar was the terminus for many trams and there were three tram lines across O'Connell Bridge. The positioning of these lines ensured that the bridge could not be used to its maximum extent. There was an area between the lines and the central median which was so sterilised from traffic that it was long used as a car park. Yet the problem continued to grow. The Minister for Justice in an interview with the *Irish Times* in 1926 revealed that the information at the disposal of the civic guard authorities was that 100,000 vehicles entered and left an area of no more than half a square mile in the city centre over a ten-hour period. They found that 30,000 vehicles entered or left the port during that period. Furthermore, they found that 50 vehicles per minute converged on College Green while 35 vehicles found themselves at the junction of Nassau and Grafton Street. O'Connell Bridge south saw some 40 vehicles arrive each minute and 38 vehicles reached Nelson's Pillar (*Irish Times*, 28 August 1926, p.9). This latter figure was used to suggest once again that the Pillar be removed, but that is a different story.

Dealing with Butt Bridge now became a priority but they had an alternative. The winning entry in the 1914 town planning competition was that submitted by Patrick Abercrombie and his colleagues. His *Dublin of the Future* was published by the Civics Institute in 1922 and it contained detailed suggestions for a transformation of the traffic circulation system. Abercrombie's contention was that the problem was one of a radial system coming to disparate foci without an easy means of traffic being able to move from one focus to another. Traffic had to come into the centre before it could be redistributed; this gave rise to bottlenecks. His solution was a traffic centre, which he located not to the east of Carlisle Bridge but in the historic core of the city. It was a rebalancing of the city back towards its geographic centre but Abercrombie did not situate this rebalancing in any form of political discourse. He was not recapturing a Hiberno-Norse tradition or anything like it. His plan was much more pragmatic. It suited the existing road network and it allowed him to have two separate foci in the city. One of these was the social and commercial city, largely to the east of the historic core, and then the traffic circulation system in and around the historic core.

His principle could be seen in operation in Paris at the rond point at the Arc the Triomphe, the convergence of twelve routes currently. For Dublin, there would be two centres. The north side one would bring together nine routes, while the centre south of the river would bring an additional six routes into the system. Traffic would flow freely around the space, using two bridges and would easily be able to regulate its path to and from the centre. Serving these foci would be a system of new and improved radial roads and some super-normal radials, all of which would feed into three circumferential roads.

It is always important to remember when referring to Abercrombie's plan that

it was a competition entry and, therefore, designed to have impact. However, the idea was a bold one, even if it might have resulted in carnage on a metropolitan scale. His choice of the historic core also selected some of the areas of the city most in need of redevelopment and locations where the necessary demolitions would be far easier to achieve.

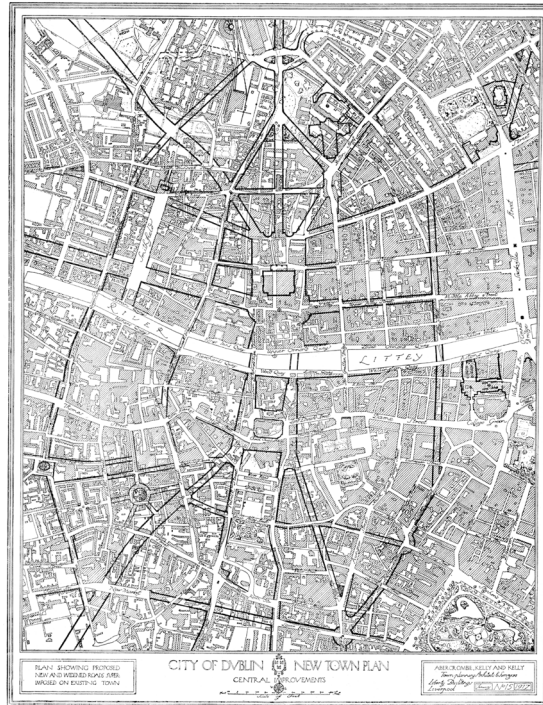


Figure 5. Abercrombie's suggestion for a traffic centre superimposed on the built environment and showing the extent of the demolition needed. Abercrombie, 1922, plate 28.

It was also an expensive solution but it emphasised the point, if it needed emphasising, that getting traffic across the Liffey was not a solution in itself. The traffic had to reach the Liffey first and then get away from it; road planning and bridge building had to go together.

It was never seriously considered as a single project, though various elements of it were to recur in planning schemes over the next fifty years. The Port of Docks Board stuck with their plan for Butt Bridge and a report of one of their meetings in 1925 shows just how exasperated they had become. The swivel bridge, the object of admiration some fifty years previously, was now described as an eyesore and such was the condition of the pontoon that it was an accident waiting to happen (*Irish Times*, 3 April 1925, p.3). The Chairman of the Board, Mr Walter Baird, complained that they were being blamed for the condition of the bridge when

it was the case that the Board had done everything it could to get the funding necessary for a new bridge. They had pressed that quest to the limit of their powers but they had lost in the courts. He hoped that 'in view of that result, no one who knew the circumstances could lay any blame on the Board and he hoped that note would be taken of that discussion by somebody who would bring the objecting Councils to a sense of their responsibilities'. There was no indication as to who that 'somebody' might be and therein lay the crux of the issue. There was no means whereby the heads of the various bodies could be knocked together in the hope of common sense emerging.

They considered the matter further and their Law Agent gave them two alternatives. The first was to promote a private bill in the Oireachtas. This would sort out the problem with the 1876 Act, as described above, and give the Board the power to raise the tax necessary to not only maintain, repair or reconstruct but also rebuild the bridges on the Liffey, which the exception of the metal bridge which had its own governance. If this was to be done, then the question of extending the liability for such a tax to the counties of Wicklow, Kildare and Meath should be addressed since they benefitted from the commercial opportunities of the city. However, the Agent was sufficiently wise to note 'that to make any alteration would be likely to entail increased strenuous opposition in the course of which question might be raised as to the franchise and constitution of the board (*Irish Times*, 5 February 1926, p.3). The alternative was for the Board to go it alone by seeking legislative approval to allow it to create and issue stock to the public for the limited purpose of rebuilding the bridge. This would eliminate any of the complexities of governance since the matter would be entirely within the control and responsibility of the Board but this approach was not favoured by the Board. During the course of discussion, several members were reported as being also in favour of an additional bridge – a transporter bridge and this was to prove to be the most interesting concept in the discussion that followed.

The practice of Public Bodies bringing private bills to parliament is not commonly followed these days – Trinity College Dublin being one exception. The heyday of such an approach was over by the time that the Port and Docks Board decided to go that route but the legislation was introduced in 1927. It should have been a rather staid and stolid affair with debate focusing on the intricate detail of taxation. The Board might have been in good spirits because they had to deal only with the Dublin City Commissioners rather than the Corporation, it having been prorogued in 1924, and they might prove more reasonable. They still had the opposition of Dublin County Council and the council decided at a meeting on 27 January 1927 to oppose the bill because the entire county was to be made liable for the cost of the bridge, which was estimated at £90,000.

The Bill was introduced in the Seanad where it got an easy time. In fact, the taking of the second stage on 24 February 1927 provided some amusement. Maurice George Moore arrived just following the decision to have a second reading. The transcript of the Seanad contains the following exchanges:

Colonel Moore: I suppose I am too late now to object to the Second Reading of the Butt Bridge Bill? I really came in for that purpose.

Cathaoirleach: I am afraid so. If you had given me intimation I could have waited for you.

Colonel Moore: I blocked it yesterday.

Cathaoirleach: That is not enough. You might have repented in the meantime. However, it is too late now.

(Seanad Debates, 8(8), col. 340)

The Dáil debate turned out to be much more interesting because the Oireachtas became the focus for a proposal which would have provided Dublin with a piece of distinctive architecture. There was opposition to any redevelopment of Butt Bridge and argument in favour of a new bridge further to the east. Because of the need to keep open the docksides, the new bridge was proposed as a transporter bridge. The concept is a simple one. Rather than a fixed structure at ground level, a gantry is built at a significant height above the ground. From this is hung a platform or gondola and it is the movement of the gondola from one side of the river to the other that transports the vehicles. The advantage is that there is no disruption to the river traffic except when the gondola is in motion. It is unclear whence the interest in a transporter bridge came. At the time of the discussion, very few had been built, no more than ten or twelve, with small concentrations in France (Rouen and Marseilles) and in the UK. The largest and second largest surviving examples are the Newport Transporter Bridge in Wales where the height of the towers is 74m (242ft) and the height of the horizontal beam above the road is 54m (177ft). The gondola makes the approximately 200m journey (645ft) in just over a minute and it can carry six cars and 120 passengers. The Tees Transporter rises to 49m (160ft) and spans about 180m (580ft). Here the gondola carries 200 people, 9 cars, or 6 cars and one minibus across the river in about 90 seconds. Despite their impressive dimensions, these two bridges had nowhere near the capacity being contemplated for the new Dublin bridge.

Matters did not go well for the Port and Docks Board and they found themselves up against the President of the Executive Council, W.T. Cosgrave. In opposing the second stage of the Dublin Port and Docks (bridge) Bill in the Dáil on 11 March 1927 both President Cosgrave and Professor William Magennis pointed to the increase in traffic in the city since the original building of Butt Bridge and agreed that solutions had to take account of the demands caused by future growth (Dáil Debates, 18). President Cosgrave pointed out that the costs associated with rebuilding Butt Bridge on its present site had spiralled to £90,000 and rather than spend that money, a new bridge was needed some 300 yards (100m) to the east. Buttressing Cosgrave's argument, Professor Magennis argued for an holistic solution. Traffic was jammed at College Green and a newly constructed Butt Bridge (even accompanied by a widening of Tara Street) would merely move the problem to a new location. Traffic had to be taken further to the east before it crossed the Liffey and in order to preserve berthage, this had to be a transporter

bridge.

This was very significant opposition and the supporters of the Bill recognised that they needed a compromise or the Bill would have to be withdrawn. Mr Hewat, also a member of the Port and Docks Board, made a half-hearted defence of the Bill. He pointed out that the Board had considered a bridge to the east of Butt Bridge but felt that the suggested Moss Street location was unsuitable. He also added that it was not reasonable to expect the Board to put forward a bill for another bridge since they would lose quite valuable berthage. As he put it: 'there are two lines of cross-channel steamers there, there is practically all the cement trade of the city there, and practically the whole of Guinness's traffic is handled there (Dáil Debates, 18, col. 1809).

After some debate a compromise was offered in that the second reading of the Bill would be delayed so that a Dáil committee could examine the proposal along with other proposals. This was a fudge and Mr O'Higgins TD explained it thus.

It might be in conflict with our defined procedure here without passing the second reading to set up a Committee of the Dáil to weigh the pros and cons of the proposal embodied in the Bill. But on the basis of a long postponement of the Second Reading I think it would be easy by agreement between parties to ensure that such an examination would, in fact, take place, and then people would be in a better position to discuss and weigh the points each way after, say, a six weeks' postponement. I think there would be very little difficulty in securing that the officials primarily concerned in matters of traffic and other issues that are involved would attend before a Committee, even if that Committee were not a Committee of the Dáil in the full sense of the word, but a Committee set up by agreement amongst the groups within the Dáil.

(Dáil Debates, 18, col. 1814).

Since it was this or nothing, there was very little difficulty indeed in persuading the Board to cooperate. A committee was appointed, consisting of Deputies Richard Corish, Osmond Esmonde, John Good, Thomas Hennessy, Batt O'Connor, and Liam Thrift, who met for the first time on 1 April. Over the next few weeks it considered evidence from a variety of experts. Unfortunately, the minutes of evidence have not been preserved in the Oireachtas library and all that remains are the newspaper reports and the conclusion as communicated in the Dáil on 4 May 1927. In essence, it was a compromise. The Port and Docks Board Bill could continue and Butt Bridge could be rebuilt but it had to be amended to provide also for a transporter bridge.

The evidence given and reported in the *Irish Times* on 9 May advanced the cause of the transporter bridge because it would be relatively cheap to build at £40,000 and would be part of an outer circle routeway that would facilitate the diversion of traffic away from the city centre. This had been an element of the

Abercrombie plan which looked at the route network beyond the central area.

The committee accepted the view outlined above of the congestion points. It particularly noted that much of the traffic from the port (30 per cent was suggested) was bound for the south-west of the city and this had to engage with the city centre traffic. This was slow traffic, much of it horse-drawn, and it flowed via Butt Bridge and Tara Street into College Green. It was also noted that bus traffic was adding to the problem and chaos was avoided only by regulations that limited bus traffic crossing the river. Furthermore, it was anticipated that bus traffic was set to increase in the near future. One writer to the *Irish Times*, writing in support of the tram system, could see the benefits of a bus system but worried about it. He did not feel that the police 'would be capable of coping, under existing bridge and arterial-street conditions with the complex, though undoubtedly mobile, system...' (*Irish Times*, 20 August 1929, p.8).

The 1923 traffic census had also shown that about 9,000 vehicles crossed Butt Bridge in ten hours and almost 5,000 of these were horse-drawn commercial vehicles. This was described as a 'procession of extreme slowness' (p.9) given that the bridge was so narrow. Moreover it was estimated that between 40 and 60 per cent of this traffic made its way up the quays to Butt Bridge only to go down the quays on the opposite side.

The Port and Docks Board produced evidence which showed that the centre portion of Butt Bridge was fragile, dangerous and unsafe to bear heavy loads. If it were not for the fact that the volume of traffic that needed to use it was so great, it would have been necessary to limit the loads.

To ensure clarity on what the Port and Docks Board had to do, President Cosgrave read the solution into the record of the Dáil.

In view of the recommendation of the Committee and of the undertaking of the Port and Docks Board I would waive any objection to the Second Reading of this Bill. I would like to say, from the information at my disposal, that it is considered necessary that the transporter bridge should be capable of dealing with 1,000 vehicles per hour, and also that the bridge should run diagonally to link up Guild Street and Cardiff Lane, with the avoidance of two corners which might constitute a danger to traffic—one out of Guild Street and the other on to the bridge. It is further stated that considerable benefit would be derived if it were found possible to widen the corner of Guild Street, and it is also suggested that the Port and Docks Board should agree to give facilities for the construction of the continuation of Amiens Street down to the quays.
(Dáil Debates, 19(20), col. 2045)

This was a rather precise direction, setting not only the location but also the capacity of the bridge. The proposed bridge was going to be massive and quite outside the experience of any city. The Oireachtas was showing that it too was

capable of exercising detailed governance over the city when it was necessary. While there was no objection to the decision, Deputy Esmonde felt moved to note that the solution had been found within the very narrow frame of traffic. He would have wished that more consideration had been given to the effect on the appearance of the city. He concluded his comments with a gloomy 'Possibly it may work out all right in the end' (Dáil Debates, 19(20), col. 2045).

The Port and Docks Board, recognising that it had to bow to its fate, had proceeded to amend its proposals even before the formal report to the Dáil. The required statutory notice (dated 20 April 1928), mandated the building of a transporter bridge which would cross the Liffey at a location near the southern end of Guild Street and the northern end of Cardiff Lane. It also required that a 'bridge rate' was to be levied over the city and county of Dublin – something which did not please the authorities in the county. It also capped the total borrowings at £300,000. Opinion outside the Dáil was not entirely sold on the idea. Writing in the *Irish Times*, Mr Delap of Delap and Waller, civil engineers, suggested that before a 'glorified ferry' was built over the Liffey, the problems with O'Connell Bridge and Butt Bridge should be dealt with and Tara Street should be widened. He reminded readers that over half of the area of O'Connell Bridge was given over to car parking and this was an unconscionable waste of the resource. Only when these solutions had been tried and shown to have failed, should a further bridge be contemplated, he argued. (*Irish Times*, 21 May 1928, p.8). However, despite any such reservations, the legislation proceeded.

The legislation was back on track and it followed normal procedures, the next of which was a detailed consideration of the Bill by a joint committee of both houses. The committee heard the same evidence as before and the only excitement was that Dublin County Council tried in vain to negate the financial obligations which would follow the Bill's passage. All that was left to argue over now was whether a new bridge or a reconstructed bridge was needed and whether the one further to the east should be a transporter bridge.

Mr Delap, as President of the Institute of Civil Engineers, argued that Blood Stoney's design for Butt Bridge foresaw a fixed bridge even though the original design was for a swivel bridge. The argument was that it was clear that the Loop Line railway was going to be built even as the swivel bridge was being designed and it was provided with the necessary supports and piers to sustain a fixed bridge of greater dimensions. This would have the advantage of permitting the current bridge to be used while it was being extended and the cost would be about half of the estimated £120,000, which a new bridge would cost. It was further argued that Tara Street should be widened along its east side to facilitate the extra traffic, which necessitated setting back the Tara Street Baths. However, there was equal evidence that a complete rebuild of the bridge was essential and that it would have to be closed while this was happening. Even after the Bill was enacted, the issue was hotly contended.

Criticism of the transporter bridge idea focused on the fact that it was a 'stop start' operation, requiring traffic to be held up for a period until a gondola was

full. There were also few satisfactory examples to look upon, especially as the proponents of the transporter bridge suggested two gondolas instead of the normal one (*Irish Times*, 23 November 1928, p.11). Other aspects of the bridge would prove to be more satisfactory and the evidence of Mr Burgess, Borough Engineer for Middlesbrough, was positive. His evidence was that the Tees Transporter Bridge operated without hindrance to navigation. He noted that as a toll bridge, it had yielded a profit for each year of its operation. He was enthusiastic about the proposed Dublin bridge and felt it would work. However, perhaps the most interesting evidence was that of Mr Mallagh, engineer for the Port and Docks Board. He produced a scale model of the bridge with its double gondola. This was on a grander scale than the Tees Bridge with two double-decked gondolas. The double gondola would have only a maximum capacity of between 700 and 800 vehicles per hour if it worked at maximum efficiency of a five-minute service. A reproduction of the scale model in the *Irish Times* of 24 November 1928 (pp.10-11) shows a very heavy and bulky structure supported by two massive piers, which would certainly have made a dramatic impact on the city's landscape.

This still left the matter of Butt Bridge to be resolved. The Port and Docks Board met on 16 January 1930 and accepted a joint report from the Board's engineer and a consulting engineer, Professor Purcell. They had examined four competing proposals in the hope of putting the debate to bed, especially the accusation that the Board had been extravagant in its plans. They recommended that the Board proceed with its own proposal for a three-span, reinforced, concrete bridge. The solution required the closure of the bridge and this posed a huge problem in terms of how to deal with the traffic of the city. Butt Bridge was closed at the end of November 1931 and the *Irish Times* published a diagram on 1 December (p.2) showing the criss-crossing lines of traffic that would be in force for the duration of the construction. Looking at this diagram, it is small wonder that traffic chaos was feared; it was just as well that the traffic was slow moving. By April 1932, the new bridge was largely complete and the *Irish Times* published two photographs and a detailed account of the construction on 14 April (p.3). This was also the opportunity for the various contractors to take advertisements, promoting the quality of their work.

The naming of the bridge once again brought the different roles of the Port and Docks Board and Corporation into focus (see Figure 6 below for *Dublin Opinion's* view on this). There was no need to change the name of the bridge. Indeed both bodies had avoided the issue at its original opening by simply letting the bridge name itself. This time, however, the Port and Docks Board was not as wise. In an outburst of piety, representations were made that the bridge should be renamed Congress Bridge to commemorate the Eucharistic Congress that was set to take place later in the year. The Dublin Port and Docks Board passed such a resolution on 24 March and Dublin Corporation followed suit on Monday, 3 April. The Corporation was given the opportunity to avoid a vote when Mrs Kettle, lately translated from the Rathmines Council, asked the Law Agent to comment on where the power to change the name lay. The Law Agent responded that it lay with

the Port and Docks Board. However, the Corporation was not to be outdone in piety by the Port and Docks Board so they voted in favour of the change too. That evening, they also voted to set in motion the process whereby Beresford Place might be renamed Connolly Place, though this ultimately came to nothing. It is not clear that they saw any irony in this.



Figure 6. The spirit of co-operation between Dublin Corporation and the Port and Docks Board. *Dublin Opinion*, 1954, p.199.

This rush of blood in both bodies was quite amazing when it was considered whose name they were proposing to remove. They deluded themselves that the new and grander bridge which would replace the metal bridge could be named Butt Bridge but there were no serious proposals to do this. Common sense was quickly restored when the Board found that there was little public enthusiasm for the name change. The controversy was over by 28 April 1932 when the Port and Docks Board decided to reverse its decision. Instead, it was agreed that there would be an inscription on the bridge, noting that it was rebuilt in the year of the Eucharistic Congress. This was to be in Irish on one side of the bridge and in

English on the other. There is no sign on the current bridge that this was ever done. The new Butt Bridge was formally opened on 7 June 1932 by the archbishop of Dublin, Dr Byrne, in the presence of the members of the Port and Docks Board, Dublin Corporation and the Oireachtas.

The transporter bridge

Butt Bridge was widened but the Transporter Bridge never materialised, though the idea persisted for decades. The 1929 Port and Docks Act stipulated that the bridge be built within seven years, though with the approval of the Minister of Transport, a three-year extension was possible. Dublin Corporation was slow to act and in 1938, the Port and Docks Board wrote to them, complaining that they could not start work on the new bridge until Dublin Corporation had fixed on the access routes. It was noted that a similar letter had been written two years previously to no effect. However, by then, the transporter idea was falling out of favour and a new idea – a rise and fall bridge – was emerging.



Figure 7. The Eisenbahnhochbrücke Rendsburg – a surviving example of a transporter bridge. The gondola now can carry four cars. Wikimedia Commons

A meeting was held on 30 July 1936 between representatives of the Port and Docks Board, Dublin Corporation and the other agencies involved where they discussed the merits of a ‘rise and fall’ bridge over the approved transporter bridge. No commitment emerged from the meeting but it seems that the Port and Docks Board now supported a rise and fall bridge, an example of which had recently been built on the Tyne at Newport. In this design, access to berthage was maintained by raising up the entire carriageway and allowing ships to pass under. This had the advantage of allowing the bridge to function as a normal road for most of the time, without the complexity and delays inherent in the use of gondolas. The

Newport Bridge was completed in 1934 and covered a span of 82m (269ft) and the roadway could be lifted to a maximum height of 37m (121ft). This was well within the parameters of what would be required to span the Liffey and, though it was seen as an engineering challenge, it was also seen as feasible. By 1939, it was clear to the General Purposes Committee of Dublin Corporation that the Port and Docks Board (Report 7/1939, p.41) now wanted a lift bridge and it was also their view that new legislation would be necessary. It would fall to the Port and Docks Board to sponsor such legislation.

Dublin Corporation did not share the same enthusiasm for the project. They had a lot of calls on their budget for housing, road construction and bridge improvement and the proposed single bridge would eat heavily into this budget. In 1938, the *Irish Times* enquired of the city manager, P.J. Hennon, as to what was being done, there being 'apprehension that definite action is being put on the long finger' (*Irish Times*, 13 September, p.4). He replied that firstly, the bridge was the responsibility of the Port and Docks Board, to which special borrowing provision had been given in the 1929 Act. Nonetheless more had been going on quietly in the background and the bridge (or bridges) would be a primary concern of the Sketch Development Plan to be prepared by Abercrombie and his colleagues. They had to evaluate two locations for the new bridge as well as looking at the question of the Ha'penny Bridge, the replacement of which had been under consideration for some time. This awaited the preparation of new Ordnance Survey plans and the completion of a traffic survey by the Garda Síochána. Moreover, new legislation might be required, considering that the transporter bridge would now be a lift bridge. The city manager expected the Sketch Development Plan to be ready in six months. When these matters were settled, he raised the prospect of a bridge linking East Wall with Ringsend. It was as neat a sidestepping of the issue as could be achieved.

It was a reasonable position for the *Irish Times* to take in arguing that the new bridge had been put on the long finger. Dublin Corporation had recently outlined a major programme of social housing for the next five years and even that was not going to solve the housing need. There was a crisis in housing provision and a fear that the problem was growing faster than houses could be built (McManus 2002, Brady 2014). The transporter bridge was a grand project and it was going to cost Dublin Corporation more than it could afford. The Corporation would have been perfectly happy with a fixed bridge and that is what it ultimately got, though decades later. While it would be fair to suggest that the transporter bridge was not a priority, it must also be noted that its provision was included in the brief given to Abercrombie and Robinson as planning consultants. In their Sketch Development Plan (Abercrombie, 1941), they accepted the arguments that had been put to them. The report noted that one of the principal traffic problems was how to ease the centralised traffic stream converging on O'Connell Bridge and Butt Bridge. The solution was to build new routes both east and west of O'Connell Bridge. This was to be done in the context of the improvement of the inner ring roads and the building of a new route parallel to the quays on the southern side. This would run

from Misery Hill on the east, via Fleet Street and Cook Street, to join James' Street to the west.

They accepted the need for a bridge to the east and evaluated the two possible solutions. The first was on an approximate line between Cardiff Lane and Guild Street and west of Royal Canal Docks while the second was further east at Grand Canal Dock with a continuation of Thorncastle Street, joining on the north side with the quay west of Alexandra Basin.

The second option was not feasible since it diverted traffic very far to the east and would have necessitated two additional bridges – one over the Dodder to connect to the South Circular Road and one to span the Liffey. However, the virtue of the east link was realised some decades later with the building of the first toll bridge (Figure 8).

The first option was favoured because it would alleviate the congestion from Butt Bridge but it needed to be sufficiently distant from Butt Bridge to disperse the traffic in a sensible manner. The possibility of a tunnel was dismissed on both cost and effectiveness bases. What is interesting is that the consultants did not discuss what kind of bridge it was going to be or should be. They took it for granted that it would be a lift bridge: 'we understand that a rise and fall bridge similar to that recently erected over the Tees at Middlesbrough is in contemplation' (p.19). However, they made a virtue out of necessity and suggested that if the bridge must be of this kind, then it should be of the Tees Bridge type and that, given its scale

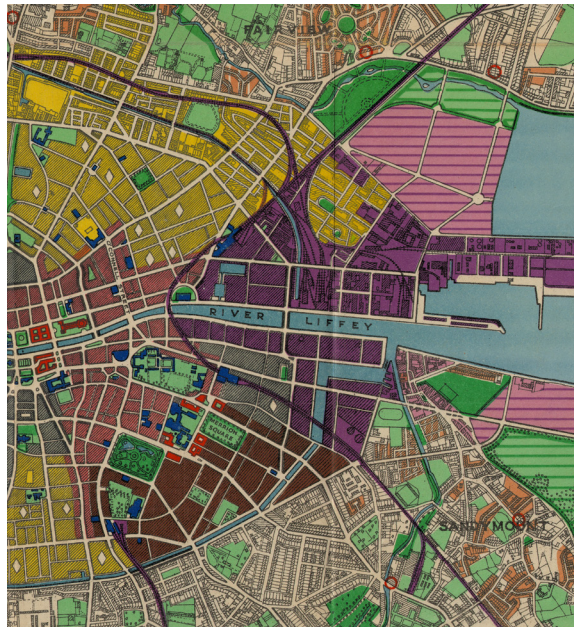


Figure 8: The bridge and road network proposed in Abercrombie's Sketch Development Plan. Abercrombie, 1941, 1:20,000 plan to accompany the Sketch Development Plan.

and bulk, it should be featured as a 'gateway' to the city. To that end, they pleaded that an architect 'should be associated with the engineer' (p.19). They were also of the view that it was unfortunate that the Corporation should have decided to proceed with the Newfoundland flats development since it put residences right in the middle of what could be an industrial and commercial area, once opened up by the new bridge. The only possible justification would be that the flats would be reserved for dock workers (Report 7/1939, p.43).

That is as close as the Corporation got to completing the project. By the end of the 1940s, they wanted no more to do with it. After all, they had now decided against completing a statutory town plan for the then foreseeable future and they were devoting all of their resources to the housing programme, which was getting underway after the shortages of the emergency. There was no spare money to be spent on grandiose plans and the effluxion of time provided the means to escape from the project.

The means of escape were provided in an answer to a question in the Dáil to the Minister for Local Government, Brendan Corish (2 December 1948, 115(7)).

The 1929 Act provided that the transporter bridge should be completed by April, 1936. Power was given to the Minister for Industry and Commerce to extend this time limit, on application by the board, by three years, and an extension was duly granted to 1939. The intervention of the emergency prevented any further progress which in any event required new legislation, the 1929 Act no longer applying. Since then the Harbours Act, 1946, and the Local Government Act, 1946, have been enacted, and it is open to the Port and Docks Board to proceed under these Acts if they intend to have a new bridge constructed to the east of Butt Bridge.

Consideration of the matter is now being revived by the Corporation and the Port and Docks Board, but even if it is decided to proceed with such a project it seems extremely doubtful, in view of the magnitude of the work and the present position in regard to materials, whether a bridge could be successfully undertaken for a considerable number of years. (col. 900)

The bridge-building project was, in essence, back to square one when in 1948, a joint committee was established between Dublin Corporation, Dublin County Council and the Port and Docks Board to consider the bridge. More talk ensued but no decision was taken. Things finally came to a head when Dublin Corporation met with the Port and Docks Board on 3 September 1953 and argued that they needed their own assessment, independent of the Port and Docks Board, before proceeding further. The Port and Docks Board commissioned its own report in 1954 but it did not endorse the idea of a bridge, at least not immediately. The report by Major Alington, a former Chief Engineer in the UK Ministry of Transport, instead suggested that much could be done by careful traffic planning before a new bridge might be necessary. This was the end of the idea of the transporter bridge and the

lift bridge. The need for new bridges was subsumed into the general consideration of the planning needs of the metropolitan region.

It was not until 1978 that the Talbot Memorial Bridge was built, a one-way bridge connecting an extended Beresford Place to Moss Street. This was much closer to Butt Bridge than had been previously contemplated but, by then, the berthage had ceased to be important for the city in that location. As explained in Moore (2006), the needs of the port, by then, demanded deep water, mechanised berthage and this could be provided only far downstream. The 'Ringsend' bridge eventually was built as the East Link Bridge in 1984.

Governance as an issue?

Depending on whether the 1930s Butt Bridge is seen as a renovation of the existing bridge or an entirely new construction, the gap in time between the building of Butt Bridge and the next bridge on the Liffey is either 46 years or 99 years. During that time the city of Dublin grew significantly and became more and more suburban in population but despite the suburbanisation of some business, the city centre maintained its dominance over business and shopping until the end of the 1970s at least. The absence of alternative routes forced traffic into the city centre, whether or not it had business there. The worst traffic jams in the city were experienced in the 1970s when it was not uncommon for journeys from Baggot Street to the city centre to take upwards of an hour. It did not take much to produce spectacular delays when gridlock would result. These were the days before the introduction of the DART service and the installation of computer-controlled traffic lights and it is not suggested that the building of more bridges alone would have prevented the jams. Nonetheless, it can reasonably be argued that the city suffered because of a lack of routeways that could divert some traffic away from the city centre.

From the discussion above, it has emerged that the need to provide more bridges and routeways was recognised early on. This aspect of city planning figured strongly in Abercrombie's first plan for the city, published in 1922 and it was re-emphasised in the Sketch Development Plan which he later prepared for Dublin Corporation and which was published in 1941.



Figure 9. The berthage which would have been lost had the transporter bridge been built.

Much of the delay was caused by the complex governance of the city whereby those who wanted to build a bridge did not control the entire process and those who had to pay for it were not central to the decision-making process. It was not just bridges where there were interminable games of administrative tennis. When Busárus was built, it was obvious that the opportunity should be taken to improve the access to Amiens Street by completing the road around the Custom House. This involved getting land from the Port and Docks Board. It took fully five or more years of complex and sometimes acrimonious discussion before this trivial land swap could be completed. But, would things have been different if the governance had been simplified? The answer has to be 'not necessarily'. In one scenario let it be assumed that the Port and Docks Board was given the legal powers to raise funding by issuing bonds and recouping the cost from port users. This would have removed any issue of complaints from local authorities about who might pay, though it would have been seen as a tax on business. This certainly would have given the Board the ability to plan and build the bridges and it is even conceivable that the transporter bridge would have been built. However, whether the construction would have had the desired effect would have depended on Dublin Corporation deciding to put in place the road networks designed to exploit the possibility. In another scenario, the powers of Dublin Corporation were extended to cover the building of bridges over the Liffey. This would have given them total control of the planning and development process. They could determine where the bridge would be built, how it would be built and how the road network would be redesigned to accommodate it. This might have had implications for the effective working of the port since the Corporation would have had powers to end the use of particular quays (Figure 9) but the port was moving steadily eastwards and reclaiming land from the sea. Would they have built the bridges any faster and would they have built the transporter bridge? The answer to both questions is probably in the negative. While the Corporation had a well-developed sense of the planning needs of the city, after all, they were the people who commissioned Abercrombie and his colleagues to produce the plan, they also had a priority need in terms of housing. Unless specific funds were made available from the State, it is unlikely that bridge building would have been undertaken quickly. This would have been particularly true of the new bridge to the east of Butt Bridge, whether it was a lift bridge or a transporter bridge. This would have been an expensive project with limited benefits and it is more likely that the Corporation would have gone for a fixed bridge, as they did when they came to build the Talbot Memorial Bridge. The reason for this would have lain in its housing needs. Despite an impressive record of building social housing, Dublin Corporation was unable to meet the needs of groups other than those on its priority list, essentially large families living in one room (or two rooms at most). This was a key element in their budget from the 1930s onwards and any bridge would have had to fight for its place in a schedule of projects.

So, it seems reasonable to assert that the manner in which the Liffey was managed and how responsibilities were divided between the Dublin Port and

Docks Board and the local authorities contributed to the delays involved in building bridges. That noted, it is less clear that other governance arrangements would have greatly changed the outcome. The most distinctive element proposed for the Liffey in recent decades was the transporter bridge. Though it would now be obsolete, it would have provided the city with a distinctive piece of architecture and would now be on the tourist trail.

Note

This paper is an expanded version of the discussion on circulation systems in Brady (2014).

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