The Kelpies, the Falkirk Wheel, and the tourism-based regeneration of Scottish canals

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Abstract

This paper examines the transformation of the Scottish Canals network for the purposes of leisure visitation as an element of tourism. It focuses on two iconic developments, the Kelpies and the Falkirk Wheel, which are considered in relation to their impact on destination awareness and tourism development in a particular locale. The key attraction sites illustrate successful brownfield regeneration, enduring visitation and the role of canals as multi-faceted tourism assets in a specific region of Scotland. In addition, the paper provides a context for the decline and resurgence of canals in lowland Scotland.

Key words: Water, Scottish tourism, visitor attraction development, destination awareness

Introduction

Waterways have played an increasing part in tourism development in both urban and rural settings (British Waterways and Birmingham City Council 2002; Hall and Page 2014; Valder 1998). In the case of Scotland, the transformation of the Scottish Canals (SC) estate deals with industrial and transport heritage in post-industrial locations wherein the leisure and tourism visitor market is now viewed as highly significant to economic development (Scottish Government 2015). The use of waterways by leisure traffic now dominates and the network has hosted the development of successful visitor attractions which have in turn helped catalyse destination awareness.

The origins of Scottish Canals as a body, and the driving force behind the development of the canal assets, are covered before the paper considers the tourism and leisure development on the lowland Scottish canal network around the town and district of Falkirk. Examining visitation to The Falkirk Wheel since its opening in 2002 is followed by consideration of the more recent Helix Park and Kelpies attraction development. The medium term impact of such developments along with increased leisure and tourism utilisation of the network provides a context for application of product life cycles (Lennon 2003) and area life cycles (Butler 1980, 2004) is also used to consider the impact on destination awareness.

Tourism in Scotland

In 2015 14.9 million overnight tourist trips were generated in Scotland achieving visitor expenditure of over 5 billion pounds (VisitScotland 2016a). The vast majority of such trips are from domestic tourists who account for 81% of all trips whilst international tourists account for 17% (see table 1).

INSERT TABLE 1 HERE

In 2015 more than 70% of all visits to Scottish regions were holiday visits (VisitScotland 2016b). Tourism in Scotland is dominated by the city products of Edinburgh and Glasgow although the nation enjoys a combination of rural, coastal, highlands and islands products. Whilst seasonality remains a concern in much of the country with greatest demand for accommodation and attractions between May and October, the urban products of Glasgow show lower levels of seasonality and enjoy greater volumes of visitation throughout the year. This reflects a lower dependency on leisure based tourism than the rural, coastal and island regions. The two main urban offers (Edinburgh and Glasgow) are the locations of 65% of the most popular visitor attractions and offer the most diverse mix of demand from leisure, business, meeting and conference visitors. Indeed, Edinburgh and the Lothians was the most visited region of Scotland with 2,762,000 trips in 2015 (VisitScotland 2016b). The nation is a popular short break (1-3 night) destination with more than 65% of visits to Scotland located in this category affirming the appeal of urban and rural short breaks (VisitScotland 2016b). Canal visitation in Scotland is estimated at 22 million visits a year (Scottish Canals 2016a) and the range of activities on the waterways network has increased. However, visitation and awareness has been catalysed by significant revitalisation and specifically by the development of the key attraction sites discussed later in this paper.

Methodology

The methodology employed incorporates primary data from Scottish Canals, VisitScotland (the national tourism agency) and data on visitor attraction performance over the period 2002-2016 (Moffat Centre 2017). Data has been collated over a period of 18 months as part of a Knowledge Transfer Project focussed on brownfield regeneration at key sites within the Scottish Canals network. This project provided valuable insight on transformation and tourism development that has been relatively recent and atypical in comparison to the other inland waterways of the UK. This research also offers some insights into an area of tourism that has received relatively little attention from scholars to date as only a few works have considered the area of canals tourism. The specific context of the Scottish examples considered here have not been previously explored. The research also includes a contextual analysis of the revitalisation of Scotland's lowland canal network.

Canals and Tourism: a logical partnership

The renaissance of canals as tourism facilities and waterways primarily focussed on leisure traffic has already been explored in the context of the UK (Fallon 2012) and internationally (e.g. Drouin 2008; Fernandes 2010; Tang and Jang 2010). It is interesting to see how these former industrial waterways enjoy a new existence as leisure and tourism sites or in some variegated form of mixed use combining freight and industrial traffic with leisure craft. Indeed, the origins of the canal systems were as created channels for freight transportation and in some cases water supply (Gibson and Hardman 1998). The introduction of new waterways impacted on local ecology in the form of wildlife and plants, changed landscapes and natural heritage (Hoskins 1981). In the UK, developments were focussed around the creation of new water connections and incorporated the development of locks, tunnels, aqueducts, bridges and a range of buildings and landscaped architecture that impacted on the urban and rural environment (Fallon 2012). In much of the UK, the canal network was primarily concerned with moving raw materials to production centres and in turn moving produced goods to market. Canal development in Scotland followed a slightly different route to the rest of Britain, determined by factors such as geography and population as well as economics. The network here enabled freight and raw material transport to avoid dangerous and lengthy sea voyages by traversing the land mass at critical geographical points (see Figure 1).There was no interconnecting network of canal rings - a term coined in the latter half of the 20th century to refer a series of inland canals that connect to create a loop (Inland Waterways Association 2013). Instead, there were linear routes that, in the main, were coast to coast (Lindsay 1968). This had an impact on the type of boats that could navigate the different Scottish canals, and both canal character and craft suitability subsequently impacted tourism in the 21st century, where narrowboat usage is limited to the lowland canals and the highland canals are still used for commercial shipping as well as leisure craft.

INSERT FIGURE 1 HERE

Much of the extant UK canal system (like many others in Europe) is relatively narrow and was as previously discussed, constructed primarily for the movement of manufactured goods with the majority dating from the period of the industrial revolution. The UK canal network spanned over 4,000 miles at its peak in the 19th century (Canal & River Trust 2015a). However, it is worth noting that not all the canals were homogenous, and even in Scotland there was a clear difference between the lowland and highland canals, with the Caledonian including open water navigation making it unsuitable for traditional narrowboats and canal barges. The focus of the sites discussed here is linked since the geographical positioning of Falkirk made it a very important town during the industrial revolution. Its position in the centre of Scotland at the junction of the Forth and Clyde Canal and the Union Canal meant that it became a key site of heavy industry (Falkirk Local History Society 2005). These were primarily industrial waterways used for the transportation of goods. The canals demise in the UK was initially catalysed by the development of rail and road transportation offering more rapid logistics and supply solutions.

Falkirk, like many other UK towns and cities dependent upon manufacturing, suffered as a result of the rapid de-industrialisation and witnessed significant decline and changes to the local economy. Harvey (1989, 192) has commented upon the 'grim history of de-industrialisation and restructuring' that left many large towns and cities with little option but to compete with each other and (re)position themselves as a particular type of post-industrial place. Here, the perception of an individual location is important and it is a real challenge for many towns and cities to reimage themselves within an increasingly competitive tourism marketplace. Some were quick to capitalise on the shift from production to consumption and became self-styled entertainment centres encouraging visitors to experience what they had to offer. The growth of such post-industrial urban tourism centres is exemplified in the UK by cities such as Manchester and Glasgow where tourism has become a significant employer and contributor to wealth (Heeley 2015). Others were slower to recognise the potential of tourism and many towns and cities stagnated and became symbols of industrial decline characterised by apathy and nostalgic recollections of the past (see Fallon 2012; Hall and Page 2014; Spirou 2011). Ironically, the issue of slow pace of transportation was to become a major factor in the appeal of canals as leisure and tourism products (Erfurt-Cooper 2009). According to the Canal and River Trust (2015a), from the early1980s there has been an increasing number of leisure licensed boats and so now a second golden age as with 35,000 registered vessels these surpass the numbers of boats on the network at the height of the industrial revolution.

The emergence of Scottish Canals as a separate and distinct waterways organisation from the parent company (British Waterways) in 2012, coincided with a further step change in ambition that saw the canals of Scotland as a wider strategic development canvas for a series of regeneration and tourism developments (Scottish Canals 2013). Scottish canals are now seen as an important element of post-industrial sites and brownfield developments (BBC 2013a). However, this was not always the case. In the early part of the 19th century there was in many parts of Europe significant discussion about the centrality of maintaining the legacy of the industrial past. In the case of canals, this debate was led by enthusiasts with a rose-tinted perception of the merits of our industrial past (Harvie 2000). Realistically, canals were the context for hardship both in their creation and operation. The sentimentality of early conservationists was rarely rooted in the realities of industrial life. However, the conservation and heritage lobby in England and Wales served to protect and help conserve the canal network, with the Inland Waterways Association becoming established in 1946 (Inland Waterways Association 2013). Such conservation and development of the relatively minor Scottish network which constitutes some 137 miles in comparison to the larger English and Welsh networks (which collectively total more than 2000 miles) was less energetic and Scotland saw a slower revival in canal fortunes. In England and Wales the 1960s saw the growth of conservation and the development of canals with lobbying led by bodies such as the Inland Waterways Association. As indicated earlier, many Scottish residents remained somewhat indifferent to the defunct waterways network and the maintenance and development of canals was slower to materialise. It could be suggested that due to a limited number of canals in lowland Scotland, the concept of canals as an integral part of the landscape was not as inherent as in parts of England and there was a lack of perceived value for the lowland waterways. However, under the stewardship of British Waterways, iconic developments such as The Falkirk Wheel were to help generate a transformation of how canals were viewed in Scotland. Indeed, until the Millennium Link project was completed in 2002 with the opening of The Falkirk Wheel, the Union and Forth and Clyde canals remained disjointed stretches of canal rather than any continuous stretch of inland waterway navigation (Scottish Canals 2016).

Transforming Scottish Waterways

Scottish Canals has transformed an estate of post-industrial waterways capitalising on the network to offer residential development, commercial premises, leisure and visitor activities as well as developing two major visitor attractions in Scotland. These attractions currently maintain a place amongst the ten most visited sites in the country (Moffat Centre 2016). This paper will consider the role of these sites in terms of catalysing visitation and building product and destination awareness. The sites introduced below offer contrast in terms of approach and investment:

- **The Falkirk Wheel -** This is a rotating boat lift that connects the Forth and Clyde Canal with the Union Canal. It is a unique and innovative engineering structure which was opened in 2002 and is located in the central belt of Scotland some 23 miles from both Edinburgh and Glasgow. It was a central part of the regeneration agenda for the Scottish Canals network and this £78 m development received funding from local authorities, Scottish Enterprise (the lowland Scotland economic development agency) the Millennium Commission and the European Regional Development Fund. The Wheel raises boats some 24 m (79 ft) and replaces the previous route involving some 11 locks (See Figure 2).

INSERT FIGURE 2 HERE

- **The Helix Park and The Kelpies -** This is a 350 hectare (860 acre) urban greenspace development on a former brown field site that was opened in 2014 at an investment cost of £43 million (Falkirk Community Trust, 2017). It incorporates performance areas, watersports, play areas and most notably two large equine steel sculptures known as, the Kelpies, representing the working horses used in the industry. These structures are 30m (100 feet high) and are highly visible from the passing motorway network (See Figure 3).

INSERT FIGURE 3 HERE

Such contrasting sites in relatively close proximity have helped build awareness of the transformation of the waterways and stimulated visitation to these destinations (Scottish Canals 2013, Moffat Centre 2017). They constitute the most recent tourism development of the canal network, a process which occurred later in Scotland that in the rest of the United Kingdom. The next section discusses the role of Scottish Canals before we then move on to look at the specific leisure and tourism development that forms the focus of this research.

Scottish Canals: origins and purpose

The organisation now known as Scottish Canals has origins that stretch back to the demise of the canals as freight carrying route ways and the nationalisation of their rail competitors. In 1948, canal ownership in the UK was transferred to the British Transport Commission. The commission oversaw the operation of the UK's inland waterways, operated by the British Waterways Board (BWB). Following difficult trading conditions, BWB ceased most of its commercial narrow boat carrying soon after formation. Indeed, by the late 1960s the canal network had reduced to just over 2000 miles, which was approximately half the size of its peak provision of circa 5000 miles in the early 19th century (British Waterways 2011).

The Transport Act (1968) classified the nationalised waterways into three distinct categories:

- **Commercial Waterways** that could support commercial traffic; primarily located in the North East of England
- **Cruising Waterways** that had leisure use potential: such as cruising, fishing and recreational use
- **Remainder Waterways** for which no potential commercial or leisure was envisaged.

British Waterways Board (BWB) was required by legislation to maintain commercial and cruising Waterways fit for their respective traffic. However these obligations were subject to being undertaken by the most economical means, which allowed BWB to reduce maintenance. Remainder waterways did not have to be kept in a navigable condition and faced abandonment or transference to the local authority. However, Scotland's lowland canals had already fallen into a state of disrepair. Following the final closure of the Monkland Canal in the 1950s, the Forth and Clyde Canal was formally closed by an Act of Parliament in 1963, and the Union Canal formally closed in 1965. Following this period of neglect and underuse, there was a gradual revival in canals for the purposes of leisure with leisure boats across the UK network reaching 20,000 by the early 1980s (Canal & River Trust 2015b). As in England and Wales, restoration work was undertaken on some canals by voluntary groups (Scottish Executive 2002).

In the 1990s, the canal network was the subject of significant investment and some £100,000,000 had been spent on canal maintenance where the Heritage Lottery Fund made significant awards to expand the canal network (British Waterways 2011). The then Labour Government, was committed to canal restoration and additional funding was announced for British Waterways in 1999. However, as late as 2009 British Waterways was still in deficit (circa £30million) and was intent on securing a more stable supply of funding while still utilising volunteers on the waterways. In 2010, BW pushed to become a charitable trust. The government endorsed this in the March 2010 budget, and the process was set in motion. In 2012 all of British Waterways' responsibilities for England and Wales were transferred to the Canal and River Trust, the new charity which now had responsibility for 2,000 miles (3,200 km) of canals and rivers. However the situation in Scotland was different and the Scottish Government chose not to locate the Scottish waterways within the charity, with British Waterways Scotland remaining state-owned and now operating as Scottish Canals (Canal & River Trust 2015a) . Accordingly, Scottish Canals is a public corporation of the Scottish Government with responsibility for managing the country's inland waterways.

Scottish Canals has its head office in Glasgow and manages and operates the following:

- The Caledonian Canal (60 miles), linking the North Sea to the Atlantic with three lochs as part of its course;
- The Crinan Canal (9 miles), linking the Clyde Estuary to the northern West Coast of Scotland and the Hebrides, cutting through the Kintyre peninsula;
- The Forth and Clyde Canal (35 miles), linking the Clyde Estuary, and Glasgow, to the Forth next to Falkirk and Grangemouth, as well as to Edinburgh via the Union Canal;
- The Union Canal (31 miles), linking Edinburgh to the Forth and Clyde Canal at Falkirk;
- The Monkland Canal (2 miles), originally built to connect the coalfields outside Glasgow to the city, but with limited remains and no longer a navigable waterway.

In comparison to the 2,000 miles across England and Wales, Scottish Canals is responsible for some 137 miles (220 km) of waterways and 17 reservoirs as well as the navigation rights to four lochs, including Loch Ness (see Scottish Canals 2016b). Rejuvenating these waterways has been crucial in the leisure and tourism development of the canals in Scotland.

Developing the Leisure and Tourism potential of Scottish Canals

Despite a slower start to the canal renaissance in Scotland than that witnessed in England and Wales, the network is now a major part of the tourism landscape in urban, highland and lowland contexts. Critical in the process of transition was the 1995 application for Millennium Commission Funding which resulted in the development of the Falkirk Wheel, which opened in 2002. This was part of a larger bid submitted on behalf of the Millennium Link Partnership which envisaged the revival of canal infrastructure in central Scotland. The link development was awarded £32 million of funding (some 42% of the project cost), and the Falkirk Wheel and associated basin and landscaping received £17 million (just over 20% of the budget cost). The £46 million balance of development monies came from BWB, seven local councils, Scottish Enterprise, the European Regional Development Fund and private donations (British Waterways 2001, 2002).

As part of the project the Scottish Canal network saw the development of the globally unique rotating boat lift, The Falkirk Wheel, which linked the Union and Forth & Clyde Canals. This major canal infrastructure development created an iconic structure for the network, the region and Scotland. It led to levels of visitation that hitherto had not been seen at Scottish Canals sites or in the vicinity of Falkirk (see Table 2).

INSEERT TABLE 2 HERE

The Falkirk Wheel catalysed significant visitation to this part of Falkirk which previously was simply not a popular visitor destination. It was the site of former industry that along with the canal network had deteriorated over time. The site itself was a former tar distillers adjacent to the canal, the legacy of which was contaminated land (Environment Analyst 2009). The refurbished canal, and the construction of the Falkirk Wheel, served to change perceptions and catalyse visitation, soon becoming a fixture on the vast majority of promotional material related to the destination (see for example, Falkirk Council 2016). In terms of visitation, it served to extend the traditional appeal of a new visitor attraction which traditionally would peak in years 2-3 following development and then see some decline (Lennon 2003). In contrast, this site was able to maintain substantial levels of visitation across the years 2002-2015 with a relatively slower period of maturation (see figure 4) and significant revivals in visitation across its years of operation.

INSERT FIGURE 4 HERE

The opening of the first phase of the water play parks on site in 2011, and other subsequent developments, contributed to the stabilisation of the slow decline in visitor numbers (Moffat Centre 2012, 2013). The growth of visitation in 2014 is the most interesting element and this can be linked quite clearly to the development of a further attraction in the form of the nearby Helix Park containing the iconic Kelpies sculptures which opened in September 2013. The decline in the most recent visitation figures is reflective of the somewhat erratic performance of the operation that contrasts with Lennon's (2003) traditional visitor attraction product life cycle. Herein a specific lifecycle for new attraction development was modelled, based on Scottish examples across the period 1990–2002. The normative curve of visitation evidenced growth, stability and decline over a period of 2.5–3 years following opening (Lennon 2003). Indeed, this profile of attendance suggests it is closer to the identified typology of 'constant innovator' which is characterised by reinvestment and the development of new aspects of the experience in order to arrest traditional patterns of decline.

The Helix Park and Kelpies development occurring almost a decade since the opening of the Falkirk Wheel, had its genesis in a successful multiple funding application which allowed for the creation of the Kelpies sculpture by celebrated Scottish sculptor Andy Scott and the wider development of the Helix Park on a former brownfield site (Scottish Canals 2015). In total, some 300 hectares of land between Falkirk and Grangemouth were developed and landscaped to comprise:

- The Kelpies structures,
- a major new park with lagoon and outdoor events area incorporating pathways and cycle networks,
- a new central canal link between Grangemouth and Scotland's wider canal network,
- a collection of new woodland areas, and
- a range of public artworks.

The development also comprises a visitor centre, hospitality, retail and water based activity hire (Scottish Canals 2015). The Kelpies name reflects 'the mythological transforming beasts possessing the strength and endurance of 100 horses' (The Helix 2013). The Kelpies acknowledges the importance of horses in heavy industry, including towing canal barges, and are described by Andy Scott as a 'paean to the lost industries of the Falkirk area and of Scotland' (Scott 2013). The Kelpies have become a major iconic development that can be viewed from the arterial M9 motorway and have gained enormous social, digital and traditional media coverage both within Scotland and internationally (BBC 2014a; New York Times 2016). One estimate suggested that The Kelpies have been seen online by more than 50 million people (Scottish Canals 2015). These sculptures were hugely successful, helping to generate in excess of 800,000 estimated visitors in 2014 (Moffat Centre 2015) and creating renewed interest in the heritage and origins of the original water infrastructure as well as drawing significant visitors to the nearby Falkirk Wheel thus enabling a rise of over 20% in visitation in 2014. However, it should be noted that visitation to the Helix Park and Kelpies has diminished since peaking in 2014. Visitor numbers dropped from an estimated 800,000 (2014) to 584,914 (2016) reflecting what Lennon (2003) identified as a much more typical attraction product life cycle. Even so for this site to exceed 500,000 visitors since opening is atypical particularly when the primary iconic 'pull' factor is a sculpture. Notably, such investment in the visual arts is not unique to the Falkirk site. It is evident that public art has seen significant investment across Scotland (Creative Scotland 2015) yet very few areas or specific locations have achieved this level of visitation. For example, there are some fifty-eight public artworks in Falkirk's neighbouring district of West Lothian (West Lothian Council 2012) yet despite such investment visitation is so marginal that it remains unrecorded in comparison to that achieved by the Helix Park and Kelpies (Moffat Centre 2017).

Clearly, the public profile of Falkirk and the region, and its reinvention as a destination for leisure and tourism visitors, is inextricably linked to the Scottish Canals developments. What has been undertaken at this site goes well beyond the typical transformation of waterways from freight route ways to leisure and tourism use. In this case, we have seen iconic developments straddling; engineering, design and the arts. This has generated significant visitation, locating this former brown field site amongst the top twenty most visited attractions in Scotland in 2016 (see Table 3).

INSERT TABLE 3 HERE

The movement in visitation for both The Helix and The Falkirk Wheel have to be treated with some caution as both are visitor estimates supplied by the operators of each attraction. The Helix enjoyed strong visitation in the first major year of operation and saw some decline following maturity in year two. This pattern of visitation reaffirms the traditional visitor attraction product life cycle (Lennon 2003). The situation is however further complicated by the fact that The Helix is an open-air site with multiple access and egress points, and susceptible to the weather, thus making accurate collation of visitor numbers problematic and increasing the impacts of weather on audiences. What is interesting is the continued growth in visitation experienced by the Falkirk Wheel in what was its thirteenth year of operation. Whilst it has clearly benefitted from the proximity of the Kelpies, it has also helped a wider regeneration of Falkirk and the surrounding area. Butler's (1980) tourism area life cycle (TALC) with its stages of growth, maturity/stability and decline has some application since it has been frequently adopted to help understand destination development (see Cooper 1989; Getz 1992; Tooman 1997). The TALC is valuable as a descriptive tool to consider the development of destinations and the changes in key visitor markets attracted. The cycle helps understand the stage of increased awareness that Falkirk and the surrounding area is experiencing. Visitation to other attractions in the area such as Callendar House and Bo'ness and Kinneil Railway have seen impacts whilst macro tourism indicators have also evidenced positive growth (see figure 2). The TALC is useful but it has been designed for more longitudinal study beyond this relatively early period of growth. Tang and Jang (2010) used the TALC to explore the initial purpose of the New York state canal system and its revitalisation as a leisure and tourism asset. This study also examined the managerial implications and the major changes in orientation necessary as transportation infrastructure networks are transformed from commercial freight operation to operating directly in the visitor economy. The example of the New York Canal system is analogous to the situation in Scotland which is witnessing a similar transformation to leisure use following a longer period of relative neglect of the canal network**.**

Major visitor attractions that are based around canals are rare in the UK. More often, the canals themselves are seen as the primary attractions. There are two examples that are pertinent here, the Anderton Boat Lift, and the Dudley Canal Tunnel and Limestone Mines. In both cases they have attracted significant funding and publicity. The Anderton Boat Lift, located in Cheshire, is a Victorian engineering marvel owned by the Canal and River Trust. It is the world's oldest (Yorkshire Post 2002) and first commercially successful boat lift (Historic England 2004). This was restored with a £7 million grant, including funding from the Heritage Lottery Fund, and opened in 2002 (Heritage Lottery Fund 2002). Secondly, The Dudley Canal Trust Portal Project comprised a £3m revitalisation project, including £1m of ERDF funding, and opened in 2016 (Walsall Council 2015). However, although they also display a combination of canal related engineering and industrial heritage, they have not realised the same impact regarding visitation. The Anderton Boat Lift attracted 117,000 visitors in 2010 (Association of Leading Visitor Attractions 2011), and the Dudley Canal Tunnel and Limestone Mines currently welcomes approximately 80,000 visitors per year

(Dudley Canal Trust 2016). Whilst these are important canal attractions they have failed to achieve the level of visitation of their counterparts in Falkirk.

Tourism as a Regional Catalyst

Tourism in Falkirk is now being taken seriously and the Falkirk Tourism Strategy (Falkirk Council, 2015b) builds on a base of canal linked attractions. The economic impact of these development is demonstrable in the extract below from the Falkirk Council Scottish tourism economic activity monitor (See Figure 5).

INSERT FIGURE 5 HERE

These developments have been important to the reimaging of the area evidencing a symbolic interplay between the past, the present and the future. These structures are post-industrial landmarks but are also celebrating the industrial past in the context of the historical canal infrastructure. Falkirk occupies an important geographical position within the Scottish lowland canal network (BBC 2014b). The Falkirk Wheel has enjoyed a somewhat atypical visitor attraction product life cycle, but the construction of the Kelpies has galvanised the tourism industry within the district (The Helix 2014). Their profile has allowed for Falkirk to be recognised as an emerging destination, rather than an area which simply contains individual visitor attractions (Falkirk Council 2016b). Although partnerships already existed (for example between Scottish Canals and Falkirk Council), as did the local authority led Visit Falkirk brand, it was in 2013 that a new Visit Falkirk brand and marketing campaign were created (VisitScotland 2014). In 2015, the launch of a new tourism strategy coincided with the development of a new website and the inaugural meeting of the steering group for the Falkirk Area Tourism Partnership also took place (Falkirk Council 2015a).

The initial success of The Helix and Kelpies, in terms of profile and visitation, allowed for the greater acceptance of this post-industrial town as a tourism destination. It successfully levered the proximity of the Scottish Canal network to help build awareness. This also gained support at various political levels, exemplified by Falkirk Council being invited as a key stakeholder in discussions surrounding a new destination development fund. The Area Tourism Strategy 2015–2020 (Falkirk Council 2015b) was specifically produced to align with the national tourism strategy, Tourism Scotland 2020 (Scottish Tourism Alliance 2012). One of the key aims of the area tourism strategy is to increase overnight accommodation by 20%. It is notable that a major UK hotel chain announced in 2015 that it was expanding three of its properties and refurbishing a fourth within the district (Falkirk Council 2015c). This indicates that investment is at least in part being encouraged by the development of the canal based attractions and the destination awareness of the area. .

The visitor numbers to The Falkirk Wheel would indicate that the site reached maturity in 2006/2007 followed by a slow but steady decline from 2007 until 2013. However, the challenge in any assessment of the attractions is that of comparative scale and in the case of the TALC the relatively early stage of development of the location. Prior to The Falkirk Wheel being constructed, there were other visitor attractions within the region, which continue to operate today. For example, since 1979 the Bo'ness and Kinneil Railway (Scottish Railway Preservation Society 2016) operated by The Scottish Railway Preservation Society, and since 1997 Callendar House (Historic Environment Scotland 2016), operated by the Falkirk Community Trust. In each case these attractions receive less than 75,000 visitors per annum (Moffat Centre 2017). However, now the area contains two attractions that have each achieved over 500,000 visitors a year from 2014 to 2016 (Moffat Centre 2017) and both Callendar House and the Bo'ness and Kinneil Rail attractions have benefitted in visitation since The Kelpies development in 2014 (see table 4).

In regards to economic impact within the Falkirk district, although tourism is growing it is overshadowed by the refinery complex at Grangemouth. Formerly operated by BP and now by INEOS, it is one of the largest manufacturing sites in the UK (INEOS 2015). It understandably maintains a significant focus in the Falkirk economic strategy (Falkirk Council 2015a). INEOS recently announced a £450m investment plan (INEOS 2015), and threats over a possible closure in 2013 made national and international news headlines and saw an increased media focus on this particular geographical area (eg. BBC 2013b; Financial Times 2013).

Nonetheless, the refinery is in a sense removed from the district as the site is out with the major town environs and separated from the main urban conurbation by a motorway. It is also removed from the regeneration of Falkirk and its relationship with canals and tourism.

Grangemouth was the only heavy industry to maintain some significant level of continuous operation since the early 1900s. In contrast the other heavy industries that were located closer to the town of Falkirk in the main declined and closed in the latter half of the 20th century.

Conclusion: Canals and destination development

This paper has outlined the ways in which canals have been central to the development of tourism in the Falkirk area during the new millennium. The creation of two iconic structures that are now widely known and instantly recognised made a significant impact at a number of levels changing perceptions locally, regionally, nationally and internationally. Falkirk can now be seen as an emerging destination, however by applying the TALC model (Butler, 2004) it would appear to be in the early stage of rejuvenation following an initial period of growth with the development of the Falkirk Wheel from 2002. The Kelpies development in 2013-14 provided the stimulus for a second period of growth and development. As Butler (2004) suggests, triggers of change were not described in the original TALC model but this later term could well be applied to the redevelopment of the canals and the two key developments of The Falkirk Wheel and The Kelpies.

The three key aims of the new area Falkirk Tourism strategy highlights the focus on a rejuvenated destination, with ambitious five-year targets such as increasing visitor expenditure by 20% by 2020 (Falkirk Council 2015b). However, it also highlights the development of a Falkirk Tourism Partnership as a key target, an indication that sustainable destination growth requires significant industry support. This could indicate that Falkirk's current position combines elements of both Butler's (2004) development phase as well as rejuvenation. It is no coincidence that the Falkirk area's economic development initiative, *My Future's in Falkirk*, was launched in 2002 (Falkirk Partnership 2002), the same year as The Falkirk Wheel opened. The strategy has recently been refreshed, with the publication of *An Economic Strategy for Falkirk 2015-25* (Falkirk Council 2015a) which features canal attractions at the heart of tourism. The change in perception and attitude to Scotland's lowland waterways has created a foundation for further investment, tourism development and increased leisure activities. An atypical approach to visitor attraction development, in the context of historical canal infrastructure, has created what it is hoped will be a step change in destination development and visitation.

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TABLES

Origins of Visitors	Trips 2015 (m)	% of total	Nights 2015 (m)	% of total	Spend 2015 (m)	% of total
Scotland	5.84	39	16.67	26	1,154	23
England	5.99	40	23.99	38	2,086	41
Wales	0.16	1	0.67	1	39	1
Total GB	12.0	81	41.34	65	3,279	65
N Ireland	0.27	2	0.94	1	97	2
Total Overseas	2.59	17	21.49	34	1,695	33
Total	14.86	100	63.77	100	5,071	100

Table 1: Volume and Value of Tourism to Scotland 2015 (VisitScotland, 2016a)

Year	Falkirk Wheel Site Visitation	Year on Year Percentage Movement
2002	317,475	n/a
2003	468,737	+47.6%
2004	450,217	-4.0%
2005	298,562	-33.7%
2006	437,388	+46.5%
2007	513,907	+17.5%
2008	500,829	-2.5%
2009	476,778	-4.8%
2010	440,623	-7.6%
2011	413,004	-6.3%
2012	414,386	+0.3%
2013	406,693	-1.9%
2014	514,170	+26.4%
2015	605,432	+17.7%

Table 2: Falkirk Wheel Site Visitation 2002-2015 (Moffat Centre 2003-2016)

Attraction	2016	2015	2014	%15/14	%16/15
Edinburgh Castle	1,7778,548	1,568,508	1480676	+5.9	+13.4
National Museum of Scotland	1,810,948	1,567,310	1639574	-4.4	+15.4
Scottish National Gallery	1,544,069	1,377,710	1295015	+6.4	+12
Kelvingrove Art Gallery & Museum	1,259,318	1,261,552	1121995	+12.4	-1.8
Loch Lomond Shores	1,316,656*	1,252,107	1172832	+6.8	+5.2
Riverside Museum	1,259,042	1131814	1049834	+7.8	+11.2
St Giles' Cathedral	1,171,793	1,108,331*	1029359	+7.7	+5.3
Royal Botanic Garden Edinburgh	790,050	836,755	766250	+9.2	-5.6
Gretna Green Famous Blacksmith's Shop	794,453	775868	783304	-0.9	+2.4
The Helix	584,914	708,471*	800000*	-11.4	-17.4
Edinburgh Zoo	574,175	633,364	670875	-5.6	-9.3
Falkirk Wheel	538,373	605,432*	514170*	+17.7	-11.1
National War Museum	678,982	601,074	593639	+1.3	+12.9
Gallery of Modern Art	646,567	589,051	622284	-5.3	+9.2
Edinburgh Bus Tours	604,846	552,006	528887	+4.4	+9.6
Stirling Castle	481,970	458,932	440819	+4.1	+5
Glasgow Botanic Gardens	400,000*	420,000*	440000	-4.5	-4.8
Dundee Contemporary Arts	380,000*	389,598*	375000	+3.9	-2.4
People's Palace,	298,352	363,673	380110	-4.3	-18
New Lanark Village and Visitor Centre	317,624*	352,704*	357500	-1.3	-9.9

*Estimate

Table 3: Top 20 Most Popular Visitor Attractions in Scotland with Scottish Canals sites in bold (Moffat Centre 2016)

Attraction Name	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Bo'ness & Kinneil Railway	59072	55864	55390	61915	64774	65690	66737	70565	66734	66332	64647	68306	68329	73830
Callendar House	**No Data Provided**		22210	18304	27613	27708	28426	32172	28884	30316	28265	36060	32514	45491

Attractions Name	2016	%2016-17
Bo’ness and Kinneil Railway	77,856	+5.5%
Callendar House	34,981	-23%

Table 4: Bo’ness and Kinneil Railway and Callendar House Visitation 2002-2015 (Moffat Centre 2016)

FIGURES

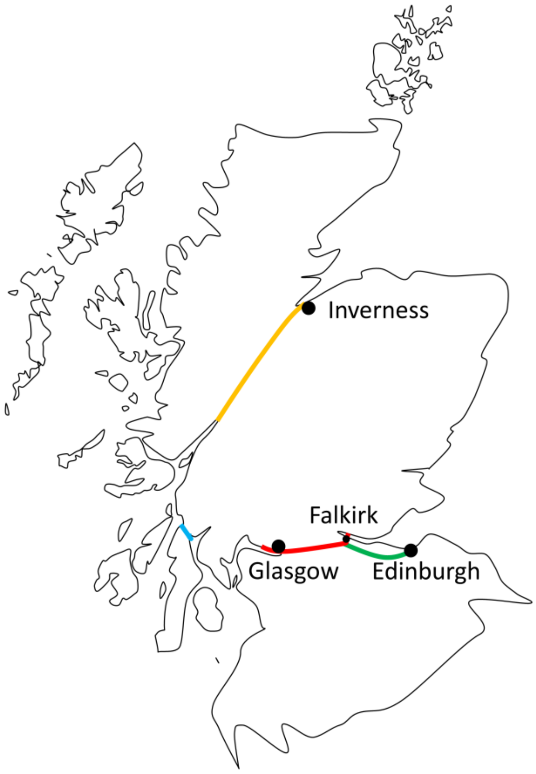
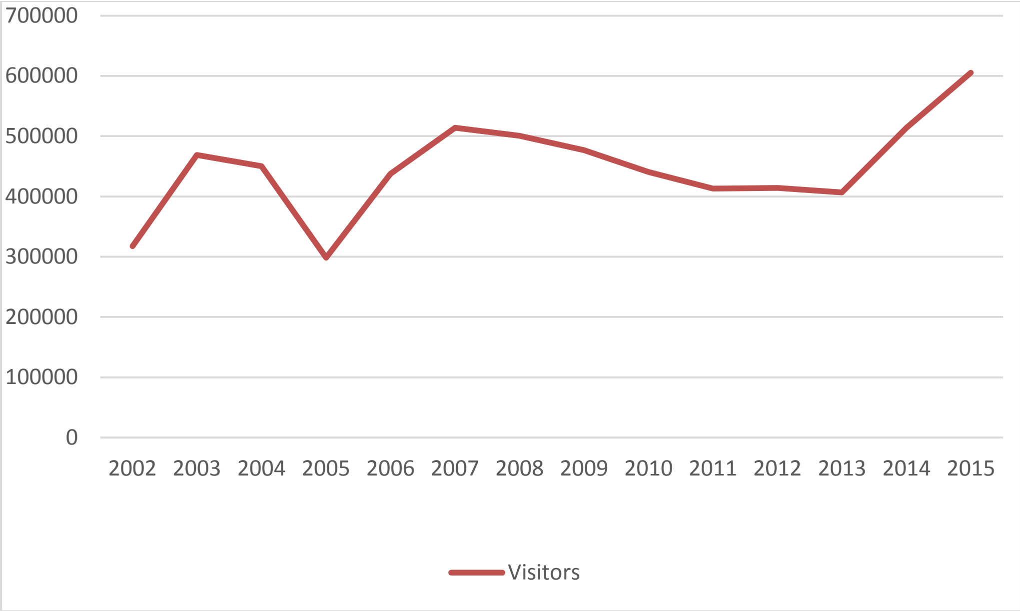


Figure 1: Map of the canals location in Scotland. The Forth and Clyde canal (in red) between Glasgow, past Falkirk into the firth of the river Forth. The Union canal links Falkirk to Edinburgh (shown in green). The Crinan Canal on the west coast of Scotland (blue). The Caledonian Canal, connecting the Atlantic Ocean on the west coast of Scotland with the North Sea by Inverness (yellow)

Figure 2: The Falkirk Wheel

Figure 3: The Kelpies



**Note:* The 2005 figures are a result of changed methodology.*

Figure 4: The Falkirk Wheel - Site Visitation 2002-2015 (Moffat Centre, 2003 – 2016)

% Change from 2009	2009	2010	2011	2012	2013	2014
Economic Impact - Historic Prices		4.8%	9.1%	11.7%	15.7%	24.0%
Visitor Numbers		1.2%	0.2%	1.2%	1.2%	5.3%
Visitor Days		1.3%	1.7%	1.3%	2.1%	5.3%
Total Employment		-1.0%	-2.1%	-2.9%	-2.6%	2.0%

Figure 5: Falkirk Area STEAM Report (Global Tourism Solutions (UK) 2015)