

Avon Local History and Archaeology

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Local History Day 2019 Saturday 27 April at Thornbury Leisure Centre

GETTING ABOUT

Texts of the four of the papers delivered. The paper by Jonathan Harlow will be published elsewhere in due course.

The Roman Roads of Avon – Bev Knott

Bev Knott's topic was the Roman roads of Avon, what they were for, and where they were, with a closer look at three of them. The fosseway ran from near Lincoln through Leicester, Cirencester, Bath, and Ilchester, and ended near the boundary between Dorset and Devon, with a branch to Exeter. It was constructed soon after the invasion (AD 43), so used to be presumed to be of military origin and purpose. Some have regarded it as marking the frontier of the province, but Wroxeter, well to its west, had been reached by AD 47. A work of this size would have taken time to survey and build: probably years, so it is not likely to have been a frontier marker: it would soon have been redundant. Legion IX Hispana was at Lincoln, and Augusta II at Exeter, so the fosseway is more likely to have been a communications road. It had no military function locally, because there were few military forts in Gloucestershire, which was not intensively occupied. The Dobunni joined the Romans early on, so there was no need for a heavy army presence.

BK showed a photograph of an excavation 100 years ago, showing the great depth of the road works. An excavation at Clandown near Radstock in the 1990s disclosed 13 levels or layers, of which some were top dressings, deducible from them having polished surfaces with rut marks, so showing multiple complete rebuilds of the road. They must have been used by heavy traffic, and over a long period. Milestones can be used as evidence, but judging from their inscriptions their purpose was not always to declare distances but to give information and propaganda about the emperor or those who build or paid for the stretch of road.

Another road ran from Bath to Sea Mills (Abona) via Bitton, possibly the (disputed) site of Traiectus, roughly along the line of the modern A431. A photograph of a stretch northwest of Bath near Kelston shows how steep it could be. Horses were hired out at the bottom of steep inclines to help get loads to the top for carriages on 18th century turnpikes, so steep sections of Roman roads might well have been coped with in the same way but this is conjecture on my part. Excavations near North Stoke have disclosed the metalling, consisting of small stones about 2 inches across, about 8 inches deep, ground down to form a hard surface. From North Stoke the road went downhill to Bitton, then into Hanham, where a length has been excavated. The route is then lost in the build-up area of Bristol, but it emerges on the Downs, near the water tower. Excavations about 3 years ago in the back garden of a house in Stoke Park Road South, Stoke Bishop, revealed a layer of stones 10 to 15 cm deep. The surface stones were worn, so the road must have been well used.

Another road has been identified in the Mendips near Charterhouse. It was used to export lead mined locally. A utensil found at Pompeii was made of lead from Mendip. Marked ingots have been found near Green Ore on the A37, at Southampton (Clausentum), and in northwest Hampshire. The ingot usually is stamped with the emperor's name. The road at Charterhouse was multi-layered. Its top surface was cambered, presumably for drainage. There was a 7 inch layer of red sandstone pebbles (the nearest source would have been Blackdown hill to the south), over two layers of different coloured clay. Current ideas about Roman roads include: 1. They were not all built to a uniform plan: materials and construction details vary. 2. The model of four different specific layers described by Vitruvius applies to courtyards and the like and is now not considered to apply to Roman roads although this is how it is described often in books and online; in fact, layers differed between roads as

our three examples show. 3. Not all lengths of roads were paved. The via Appia, leading south out of Rome, started about 312 BC, was not paved for its first three centuries. Paving was done only around Rome and other high status areas. Elsewhere the surface was of gravel or small stones, impacted. 4. Roman roads were used not just by the military, but for commerce and export. 5. Military use decreased. Forts were built but decommissioned, e.g. at Nanstallon AD 69; Exeter, short-lived, in the 70s; one in the Dorset hills in the 60s. All other forts in the south and south-west of England ceased occupation within 40 years of the invasion in 43 A.D. The military moved out when they went north. So our area became peaceful, or at least pacified, and continued to be so for two centuries. Commercial use of the roads is illustrated by reliefs showing wagons, wheeled and pulled by mules and oxen. The roads must have carried much commercial traffic and were busy. Reliefs, not from Britain, show wine and other commodities in barrels being hauled and shipped. In Roman Britain freight distribution can be inferred from the spread of products from place of production. Roads were also used to transport building materials: in the Great Bath at Bath there is a roof arch made out of box tiles (for lightness) which came from south of Cirencester: the tiles are stamped and the origin is identifiable. Purbeck 'marble' was distributed all over England and Wales. Fine pottery from kilns along the Severn was distributed the length of western Britain. Other pottery types, eg Oxford colour coated ware, are found from Cornwall to Scotland. In our area, pottery finds have been traced to origins in south Gaul. The quantity of building materials shifted must have been huge: a photograph of remains at Silchester shows the large amounts of stone required, estimated by G Boon at tens of thousands of wagon loads. In north Somerset there are many findspots along the Mendips. There was a lot of industry: saltworks at Weston super mare; quarries at Dundry; pottery at Congresbury. Agricultural products and iron artefacts required load-bearing roads.

Who decided where the roads should be? There is documentary evidence that charters authorised the construction of local roads. In Spain the Alcantara bridge was paid for by 12 local communities, whose local councils consisted of elected decurions. Places like Gloucester had the status of a colonia. Tribal areas such as the Silures, the Dobunni, the Durotriges were local administration areas called civitates; Ilchester was the central town of one.

BK concluded with a review of possible sites for further exploration. It should not be assumed that a straight road always implies a Roman origin: straight roads were allotted in inclosure awards, and a straight track now might be the line of an old railway. Non-invasive exploration can be started with a magnetometry survey.

The Dramway – Dave Hardwick

Dave Hardwick's topic was our area's first commercial railway. It originated because of coalfields around the Coalpit Heath area, and was used mainly to shift coal. The area produced coal of varying quality, which was in demand before the south Wales coalfield, producing anthracite, was worked on a large scale. The challenge was to get the coal to the river Avon, and thence to Bristol and Bath, and in the case of Bath, then on to London. There was a similar challenge south of the river, solved by the Somerset Coal Canal (long planned but not authorised until 1794) to take coal from Paulton and Radstock to the Kennet and Avon canal at Limpley Stoke, but there was no corresponding means of getting coal from the Coalpit Heath area to the river. In 1783 in a letter to Thomas Smyth of Stapleton Lord Middleton proposed a canal from Westerleigh to the Avon. An overground railway for wagons had been built at Prescott near Liverpool in 1594, and another in Scotland in 1722. Middleton asked whether a wooden wagonway could be built to Bristol.

Gloucestershire Archives holds a series of plans showing various projected routes from Coalpit Heath. One ran from the Half Moon through the Pucklechurch pits, Brandy Bottom, North Common, and Warmley brass works to the Avon near Bitton. There was a weir at Keynsham, so one branch was to end upstream of the lock for Bath and London; the other below the lock would be for traffic to Bristol. A proposal in 1804 showed many small pits at Coalpit Heath being served. In 1812 a new proposal

took a different route, involving more underground haulage. Another proposal was made in 1814, but no action resulted. In 1815 the Somerset Coal Canal was replaced by a tramway. That prompted proposals in two Acts of parliament in 1828, with two dramway routes, one to the Avon near Keynsham, the other direct to Bristol. The Bristol and Gloucestershire railway was promoted in 1827, with a branch at Mangotsfield to the river at Keynsham. In 1832 a line from Mangotsfield to Coalpit Heath was added. That allowed coal to be shifted from Coalpit Heath either to Londonderry wharf at Keynsham or to the Avon Street wharf on the harbour at Bristol.

The branch to Ram Hill was one of a number of branches off the main route. Ram Hill was the terminus of a branch that opened in 1833.

In 1844 the Bristol to Gloucester railway, broad gauge, opened. That took traffic away from the dramway, and traffic declined.

DH showed images of aspects of the remains of the dramway uncovered by south Gloucestershire Mines Research Group and others, including a run of 200 stone blocks by the Coalpit Heath cricket club, fishbelly rails, drill holes (mostly the stones have 2 holes, but some have 3, suggesting a second rail), chairs, and a reconstruction at Mangotsfield of a length of track. The track was standard gauge, single track. There were passing places, eg one at Warmley. Wagons were 7 feet wide. In the 1830s they were horse-drawn, with 3 to 6 wagons in a train. Contrary to popular belief, because the track was near level all the way, full wagons did not run by gravity down to the river. In 1844 the Ram Hill branch was converted to broad gauge. Use stopped at some time in the 1850s. Steam was already operating by the time the Ram Hill branch was opened. It was still in use into the 1870s.

The dramway is the only surviving horse-drawn dual gauge railway in the UK.

Getting Around in Victorian Bristol – Peter Malpass

Two important consequences of population growth in Bristol during the 19th century were increased congestion on the ancient heart of the city and the outwards expansion of the built up area. Both of these developments made it more difficult for people to get from place to place, thereby putting pressure on the authorities to improve the public streets. This implied both widening, straightening and, in some cases, flattening important streets and building entirely new thoroughfares. Over time a large number of very small scale interventions helped to remove pinch points and to establish consistent building lines. However, while these changes had a cumulative beneficial impact it is rather more interesting to look at the larger scale projects that resulted in the construction of a number of new streets.

The story began in 1829 with the gift of £10,000 to the unreformed Corporation by one of its members, William Weare, who stipulated that the money should be used for street improvement work. He did not specify precisely which streets were to be targeted but he did make some suggestions, all of which were eventually carried out.

The town council's own approach concentrated on routes to and from Clifton, with priority given to the link to the railway at Temple Meads, from where train services to London began in the summer of 1841. Within less than six months this generated a proposal for a new street (Victoria Street) to improve the route between Bristol Bridge and the station. Unsurprisingly, cost proved to be a problem and the council pressed ahead with other schemes, including the widening of Hotwell Road (along which droved of pigs and sheep regularly passed on their way from Cumberland Basin to the cattle market at Temple Meads). Victoria Street was not started until 1865. Other projects undertaken in the 1860s included the construction of Deanery Road as a route serving the Hotwells and lower Clifton area, and Perry Road which

was designed as another route from the city centre to the upper level of Clifton. From 1871 Perry Road was joined at an acute angle by Colston Street, thereby creating an alternative to Park Street as a way up to Clifton. Park Street was made somewhat less dauntingly steep by the construction of the bridge across Frogmore Street but it remained a challenging climb and was always too much for trams, both horse drawn and electric.

Once Victoria Street was completed attention naturally turned to the section between Bristol Bridge and the Drawbridge over the floating harbour, and eventually it was decided to straighten Baldwin Street, which had hitherto curved along the line of what is now St Stephen's Street. The new road, opened in 1881, only stimulated demand for a fixed bridge across the harbour, even though the swivel bridge had been rebuilt as recently as 1843. After much debate the council obtained powers to build a fixed bridge in 1891 and the new bridge was opened two years later, exactly where the new road across the Centre was constructed in 2017. The fixed bridge was the final link in the route between Clifton and Temple Meads and was the last major street improvement project of the Victorian period. However, there remained the question of what to do with the reclaimed space above the bridge once the redundant section of the floating harbour was covered over. The council appointed a committee to consider possible permanent uses for the site once a temporary exhibition hall was removed. Typically, the council then balked at the suggestion of using this prominent site for the much needed new Council House and the ground was laid out as a public garden in 1894.

All this points to the timidity of the council's approach to urban improvement, in marked contrast to what was happening in cities further north. In Bristol although the council succeeded in completing a number of significant improvement projects its approach was limited and skewed. It was limited in scope and ambition and skewed in favour of the rich and powerful. Moreover, it was slow to start and quick to finish, with most of the action concentrated into a few years, between 1865 and 1881. By the end of the century getting around in Bristol was undeniably easier than it had been but the inescapable conclusion is that so much more could have been done by civic leaders with a clearer vision for the future of their ancient city.

The Ups and Downs of the Clifton Rocks Railway – Maggie Shapland

Maggie Shapland's title was *The ups and downs of the Clifton Rocks Railway*: ups and downs in several senses, because not only did the cars go up and down, but ownership of the railway lease changed several times, there were changes in management and changes of policy on the part of the owners, its prosperity waxed and waned, and there were changes in the uses to which the premises were put. When the volunteers, led by MS, started work in 2005, they had little information. The owner, Peel Properties, owned the adjoining hotel, but did not favour a derelict site next door, and sold the hotel. Changes of management and changes of policy eventually allowed the team to undertake restoration works. Circumstances in 2016 led to a decision to put into a book what had been collected on the history of both the railway and the use of the premises after the railway closed: *The ups and downs of Clifton Rocks Railway and the Clifton Spa* (BIAS 2017 on behalf of the Clifton Rocks Railway Trust).

The initiative for the railway came from George Newnes the publisher, who was also involved in the funiculars at Lynton and Bridgnorth. He financed the construction of the railway from 1893, and its subsequent running, but by 1908 he had financial difficulties and

the railway was insolvent. It was bought by George White in 1912, and run by the company he founded, Bristol Tramways, until 1934. Derelict, the railway was taken over in 1941 by Bristol city council and the BBC, so there are really two stories: one of the railway and of the hotel and spa which the Society of Merchant Venturers, the landowners, insisted on being run together; and the other of the wartime and later use of the tunnel by the city council and the BBC to 1950. A third story is of the restoration works.

When the railway was constructed, it had several transport links that brought people to it. Carriages could come along the road from Hotwells; a horse tram route terminated outside the lower station; passenger steamers docked on the pontoons in the river; and from 1885 to 1921 there was the Bristol Port Railway and Pier company's railway whose terminus was nearby. As those transport links dropped off, the number of people using the railway declined.

Newnes' venture at Lynton was not successful. He invested more than £100,000 at Clifton, but again not successfully. He engaged as engineer George Croydon Marks (1858-1938). They were constrained by conditions imposed by the SMV, eg that the railway must be wholly underground; and that it be linked to an up-market hotel and spa.

The tunnel, built in 14-foot lengths with the aid of extensive scaffolding, was lined with skewed bricks, took two years to build and cost £30,000. The spa took a year to build. Impressive images were shown. Commemorative objects have survived, of which images were shown. Water to weight the car going down was pumped up the incline by a gas engine for re-use.

Images were shown of the bottom station in 1934; the spa pump room, opened 1894; the cars; and some of the associated engineering. The façade at the lower level underwent several transformations.

Accounts show declining numbers of passengers. The financial model left no money for maintenance. By 1908 it was insolvent. George White was able to buy it for £1,500. He moved the upper entrance on Sion Hill. Problems included a leaky roof; overheads increased but not the fares, so insolvency was difficult to avoid.

In the war the BBC installed a transmitting station in the tunnel in 1941. There was a barrage balloon workshop. There were there shelters for the public to use during air raids, and a considerable amount of oral history has been recorded.

Restoration began in 2005. Images were shown of several aspect of the restoration works, including the signs put up by Newnes and White. Visitors flock to open days.