

A view of NCUK university towns (Manchester)

The city of Manchester, has been mentioned many times in this series of articles. Widely regarded as England's second city (although supporters of Birmingham might disagree) it dominates the north-western region, where all of NCUK's partner universities are situated. Manchester is in reality much smaller than Birmingham with a population of only around 440,000, but the greater Manchester Metropolitan Area is home to no less than 2.6 million inhabitants and includes 3 universities each with its own strengths and distinctive culture. Of these Manchester University itself is by far the largest, It was formed in 2004 by merging the Victoria University of Manchester (founded in 1851) and UMIST (the Manchester University Institute of Science and Technology, founded in 1824).

After the second world war the University attracted engineers who had designed the world's first stored-program computers as well as theorists like Dr. Alan Turing who is universally acknowledged as the father of computing science. Many of these people had been involved in the development of computers at Bletchley Park, where they were used to crack German and Japanese war-time ciphers. All of this work was strictly hush-hush until very recently, but the technical know-how which these people brought with them laid the foundations for Manchester's pre-eminence in computing. Much of their original equipment can be seen on display at Manchester's Museum of Science and Industry. Even today Manchester is home to the UK's National Computing Centre.

Before turning to the cerebral side of this amazing city I must indulge in a digression. When I was a student in Trinity College, Dublin (TCD) we existed in an environment of unadulterated academic arrogance. We all knew that this was a place of long and honourable academic tradition. I was taught by Ireland's Nobel Laureate (Physics). But long before Ernest Walton, there was the astronomer and polymath, Sir William Rowan Hamilton, the physicist John Joly, the theoretician George Francis Fitzgerald, the engineer Charles Parsons (inventor of the steam turbine) and many others, including the philosopher, George Berkeley after whom the city in California is named. Dublin also had an Institute of Advanced Studies, which between 1940 and 1957 had been directed by the physicist, Erwin Schrödinger. In my time as a student it was not unusual to see an eminent scientist, a writer such as Brendan Behan or some film actor pass by on the street. The place had ambiance. I have laboured this point because it is one of the very important factors in making a choice about where to pursue a university education. Manchester certainly has ambiance at every level of abstraction. If we start with the City in modern times, we have the cricketer Mike Atherton, the singers Liam and Noel Gallagher (of *Oasis*). In terms of industry, if we go back a little way we have F.H. Royce, who together with Rolls created the legendary car. James Hargreaves perfected the Spinning Jenny which brought about a revolution in the processing of cotton. John Mercer developed a process of treating cotton which gave it a silk-like feel. Within our own era Eric Laithwaite is always associated with magnetic levitation, although one has to journey between Shanghai Pudong airport and Shanghai metro line 3 to experience high-speed MagLev travel. Moving to academic matters, we can start with chemistry. My professor of organic chemistry at TCD had had as his PhD supervisor Sir Robert Robinson, one of seven Manchester University Nobel laureates. It was Robinson who first represented benzene as a hexagon with a circle at the centre rather than the Kekule structure comprising three double bonds. For physicists we can enumerate John Poynting (of vectors), C.T.R. Wilson (of the Cloud Chamber), Ernest Rutherford (of just about anything in nuclear physics), Neville Mott (who improved our knowledge of the solid state), Patrick Blackett (the father of Operational Research), John Cockroft (who with Ernest Walton first bombarded lithium with protons) and Bernard Lovell who drove the creation of the wonderful Jodrell Bank radio telescope. This is located at Holmes-Chapel which is 30km south of Manchester and is worth a visit (www.jb.man.ac.uk/visitorcentre/). The underlying message here is that if you would like to see yourself following in the tradition of the greats then Manchester is an excellent choice of location for your studies.

When I first visited Manchester in the mid 1970s I was left with the impression that it had not yet recovered from the war. I could not find what I would recognise as a centre and there was no appearance of civic pride.. Perhaps the turning point for the City only came in 1996, when a terrorist bomb, placed in the City centre, caused widespread damage, estimated by insurers at £700 million (£1 billion as of 2010). Although 200 people were injured, no-one was killed. Rebuilding was essential, and in the true British 'Blitz-Spirit' Manchester has risen like a phoenix from the ashes. There is now a recognisable centre at Piccadilly. There are new tramways and a world-class concert hall. Manchester Piccadilly rail station is enormous with trains running to all parts of the country. Pendolino (tilting) trains regularly travel at 200km/hr between Manchester and London.

Manchester is an impressive city. As a result of some astute canal building early in the Industrial Revolution raw cotton arriving in Liverpool from the Americas was transported to mills in the outlying towns, with Manchester as the commercial centre, making it one of the richest cities in the world. Nowadays the famous Quarry Bank mill at Styal has become a museum where visitors can discover the history of this important industry and the people who made their living from working with 'King Cotton'.

Visitors will get to see much of this amazing city if they are there for any time, so I would like to talk about those things that are within easy-reach of Manchester. The first place is Liverpool, the home of some other NCUK universities. From here you can take a ferry to Northern Ireland, which, being part of UK can be visited on a UK visa. Blackpool is a seaside town which is 65km north-west of Manchester and is accessible by bus or train. Imagine a promenade with funfairs stretching from Galle Face to Mount Lavinia. Now, that's Blackpool and each September there are great festivities when the lights (called *Illuminations*) are switched on for the first time that year. The Students' Unions at many universities organise special excursions to witness this event. From Manchester Picadilly station one can take a train through Stockport and up into the mountains to the beautiful spa-town of Buxton. If there is any snow around in wintertime then Buxton is where you will find it. Buxton Water is internationally renowned alongside Evian and Volvic. It comes from a thermal spring which provides heated water for the local public swimming pool. The Peak District (the mountains around Buxton) is an excellent place for hill walking. Not something for winter, but with the aid of a good map and a GPS one can start from the southern extremity of Buxton (a place called Burbage where I used to live) and walk over the moor to the *Cat-And-Fiddle* pub which does excellent weekend lunches. The faint-hearted can retrace their steps, although a detour through the Goyt Valley is recommended. Stouter hearts can continue from the *Cat* towards the old silk weaving town of Macclesfield and take a train from there back to Manchester. You may be tired but the fresh air will have made it all worthwhile.