THE COAL INDUSTRY

The Coal Industry developed rapidly in the eighteenth century. Coal was the major fuel of the Industrial Revolution. As early as 1700 coal was mined in most of the coalfield areas that were to be prominent for most of the twentieth century.

Coal was used in a number of industries e.g. brewing, soap and brick making. It was also to feature strongly in the sugar industry that expanded rapidly in the eighteenth century. The sugar producing Islands of the Caribbean e.g. Jamaica and Barbados became very important in the rapidly expanding British Empire.

The North East of England was a major area for coal mining. The transport system of Britain at this time was very poor tot say the least. Coal was sent from the North East of England to London where it was known as "Sea-coal". The valleys of the Tyne and Wear in this area were very important. The coal trade in this area meant that many ships were in service. Estimates say that 1,200 ships were engaged in this activity. This was also seen as very important in relation to developing the English Navy. Newcastle and Sunderland were very important in all of this. The Forest of Dean was also an important area site of mining activity.

As the eighteenth century progressed the demand for coal increased. Mine shafts were dug to greater depths. This in turn increased the danger of mining. Mines were prone to flooding, explosion and fire due to the danger of methane which was a highly explosive gas.

Drainage was tackled in a variety of ways. Initially a chain of buckets was used, pulled by horses. Ventilation was very important, so often two shafts were dug at different levels so that fresh air could be drawn in and stale air expelled. Trap doors were often used in this process and these were operated by small children very high up in the ventilation shafts, they would sit there for many houses in the darkness.

Another method for ventilation was braziers full of burning coals were used to create upwardly rising convection currents. This was an attempt but could not solve the problem. An Exhaust Fan was produced at the end of the eighteenth century by John Buddle, a mining engineer from Wallsend near Newcastle-upon-Tyne. This became very useful for ventilating the larger mines.

Clearly going down mines raised the problem of visibility. Miners initially took lighted candles underground but this led to explosions. Methane, or fire damp as it was called, could ignite without warning. In 1815 a very famous invention for mining, the Safety Lamp, was invented by Sir Humphrey Davy, it was very clever in the way that it worked. It had a flame to provide the light but it had a piece of fine gauze which allowed oxygen to get to it but not enough make the flame too hot. Davy did not patent this invention, he was only too happy to be able to reduce the loss of life amongst miners. Some argue that the Davy Lamp enabled miners to dig even deeper shafts which created dangers of their own. There is no doubt, however, that this was very important invention in terms of improving the working conditions of miners.

Other improvements or developments were introduced. Instead of leaving uncut columns of coal to support the ceilings of the galleries, wooden pit props were used for this.

Developments had taken place in steam technology and James Watt's Rotary Engines were used to help haul coal to the surface. Pit ponies were used to haul trucks underground. Women and children were used for this in some places where the galleries were smaller. Before the introduction of the Watt engines women and girls had to carry heavy bags of coal up great heights, a series of ladders were used for this.

Steam haulage was not widely used until the 1840's when wire cables were introduced. By this time shafts of up to 300 metres could be worked. All of these developments meant that there was a vast increase in the amount of coal produced.

Coal mining existed in Shropshire there was a mine near to the railway bridge as you drive into Hanwood from this direction. Dawley, Telford where I taught in 1976 had the Granville Colliery and this only closed fairly recently. Wrexham was, of course, a significant mining area.

At the Teacher Training College I attended we used to have a once a year educational visit to Durham University, this was for students who were studying Politics and Economics as a subsidiary subject. We visited the Steel Works at Consett in County Durham. We also used to visit Mines, specifically Seaham Colliery. This was one of the mines where the galleries went directly under the North Sea. I was told at the time about six miles. The kindness and dignity of the Durham Miners made a significant impression on me.

The South Wales Valleys became synonymous with coal production. Here, as in many other mining areas, a whole culture was to develop. Education was to be a priority for many families. Miners often put huge effort into ensuring that their children were educated so that they did not have to go down the mines. Miners' Institutes did much to promote education by the purchasing of books and teaching. Equally, they were places where people could meet and where ideas could be shared. This might explain the priority of teaching for many families. I remember a time when teachers from Wales were almost a cultural stereotype.

Coal production came with a range of costs. Environmentally it took its toll. This was illustrated in the 1971 film Get Carter, starring Sir Michael Caine. A scene takes place at Blackhall Colliery on the beach there. This is close to Hartlepool in the North East of England. Coal waste was dumped in the North Sea from overhead tippers .Ian Hendry's character was killed by Jack Carter (Sir Michael Caine). His body is placed in one of the tippers like the coal. In his moment of "triumph" Jack Carter is shot dead by a hired killer. This area has now been entirely cleaned up and the remains of the Coal Industry are hard to see.

In a wider context harsh conditions meant that people bonded and there was solidarity, hence the famous Male Voice Choirs. Pub culture boomed and pubs were allowed to open earlier than they were in other places. There was a need in the Mines and Steel Woks for the men to be able to replenish the fluids they had lost in the day. The conditions in the South Wales coalfields were dramatised in the film "How Green Was My Valley" produced in 1941 it was based on the novel of the same name by Richard Llewellyn, this was released in 1939.

The point that Mining is a very dangerous activity cannot be overstated. Danger existed both for the miners and for their wider communities. This was reflected on 21st. Octobers1966 when a coal tip collapsed. This had had been formed on a mountain slope above the village of Aberfan. This was situated near Merthyr Tydfil, South Wales. The tip was over a natural spring. There had been a long period of rain which had caused liquefaction. This led to the tip suddenly sliding down the hill as slurry. Tragically, it engulfed Pantglas Primary School and other buildings. 116 children and 28 adults were killed. The tip was the responsibility of the National Coal Board. An enquiry that followed placed the blame on this organisation and nine named employees.

The Coal Industry was very important in both the nineteenth and large parts of the twentieth centuries both for Industry and Transport.

The Coal Industry was of great importance both in World War One and World War Two. In the Second World War many young men were conscripted to work in the mines as an alternative to military service, these were the so-called Bevan Boys.

In the post war World there was much tension and conflict between management and the National Union of Miners.

In 1965 Harold Wilson's Labour Government set up a Prices and Incomes Board. The purpose was to keep a check on profits and rents and also pay and prices. Against the expectation of many, Edward Heath defeated Harold Wilson in the Election of 1970. This was the first Election in which 18 year olds were allowed to vote. Edward Heath's Conservative Government abolished the Prices and Incomes Board; he hoped to reduce inflation partly through curbing the legal powers of the Trade Unions by the Industrial Relations Act of 1971.

Mining, as stated, is a very hazardous occupation and one that requires great physical and mental powers of concentration. So it would follow that miners would want the best possible pay deal for their labours.

The strike that was called lasted from 9th. January to 28th. to February 1972. There were many blackouts all over the country. I was, as stated, at Teacher Training College at the time and I remember it as a time of fun. When you are very young things often don't worry you because you do not have the responsibility of older people. Students who were more mature in their outlook to me appreciated the very serious nature of the situation that faced the country.

A State of Emergency was declared on 9th. February 1972 by the Cabinet Office Briefing Room (COBRA) afterwards the weather abruptly turned colder. The voltage of electricity had to be decreased across the National Grid.

These events also have to be placed in the wider context of the Heath Government tackling inflation that had been a feature of the British economy since the 1960's. In Germany it is part of the Constitution that Governments must strive to prevent Inflation. This is due to the effect that inflation had in the 1920's and early 1i930's in helping to fuel political extremism and contributing very significantly to the rise of the Nazi Party.

The power of the Trade Unions was shown by the phrase "Beer and sandwiches at 10 Downing Street". This was a popular saying in the press of the time. Tragically a miner (Terry Matthews) from Hatfield Colliery was killed by a lorry while he was picketing 3.2.73. The driver of the lorry had mounted the curb to pass the picket line and killed Mr. Matthews accidentally. This accident escalated the violence; there was much concern in relation to this. Tom Swaine, the M.P. for

Derbyshire North East, expressed the fear that Yorkshire would become like Northern Ireland.

This strike lasted seven weeks. At the Battle of Saltley Gate 2,000 NUM (National Union of Mineworkers) pickets descended on a coke works in Birmingham. They were joined by thousands of other workers from different industries who felt sympathy with them.

The strike was brought to an end by the Wilberforce Inquiry set up by the Government in February 1972.It recommended an increase of between £4.50 and £6.00 per week. This was a 27% increase and was strongly argued for on account of the dangerous work involved in mining.

It was felt by many that the Government had not handled the strike well; as a result the Cabinet Office Briefing Room (known as COBRA) was set up as has been just mentioned. Its overall job was the management of crises both on a regional and national basis. It is still used by the British Government today. Harold Wilson carried on as Prime Minister until 1976, when James Callaghan took over. He fought the 1979 General Election against Margaret Thatcher. He lost; she went on to win two subsequent Elections. The events of 1972 were not the end of these issues. In January 1981 the Yorkshire branch of the National Union of Mineworkers held a successful ballot to oppose pit closures of economic grounds.

There was subsequently a two week local stake over the proposed closure of Orgreave Colliery. In February 1981 the Government announced that there would be 23 mines closed across the country. The threat of a national strike by the NUM made the Government back down. There were pit closures and some miners redeployed to other areas. Some disruption would be caused when the NUM started an overtime ban that would last for the entirety of the strike.

Margaret Thatcher clearly expected confrontation with the NUM. She wanted to close inefficient pits and rely more on imported coal and using oil, gas and nuclear power as part of a wider energy mix.

Other measures had been taken. Coal had been stockpiled. The Police would be better coordinated. 43 Police Forces were linked so that police could be deployed to deal with major disturbances. Arthur Scargill called the strike at the end of Winter when the demand for coal was falling. He had not called a national ballot and so a number of areas, Nottinghamshire, Leicestershire, South Derbyshire, North Wales and parts of Lancashire kept working.

Thatcher appointed Ian MacGregor to lead the National Coal Board. He was Canadian. He had turned the British Steel Corporation from one of the least efficient to one of the most efficient steel makers. However, this transformation came at a cost, namely jobs. He had overseen a national strike that had lasted 14 weeks in 1980. He halved the work force. As stated, coal had been stockpiled. Some power stations had been converted to burn heavy fuel oil. Fleets of road hauliers had been recruited in the event of railway workers going out on strike in support of the miners.
The closure of pits would mean the loss of the principal source of employment in many communities.

The main weakness of the NUM's position was the failure to hold a national strike ballot. There were other problems, many lorry drivers crossed the picket lines they were afraid in many cases for their own employment. The Government was further helped because The National Association of Colliery Overseers, Deputies and Shotfirers (NACODS) did not come out on strike. Miners who were working in Nottinghamshire and South Derbyshire set up, as stated, the Union of Democratic Mineworkers. Ian MacGregor strongly backed this Union's position and stated that

membership of the NUM was no longer necessary to be employed as a miner. In this way he ended the so-called “closed shop “

An alternative group of miners the Democratic Union of Mineworkers led by Roy Link offered an alternative approach to Arthur Scargill leader of the N.U.M.

The defeat of the Miners had a huge impact on parts of the country that had been coal-producing areas. Ways of life that had held together for very many years came to an end.

This can be seen as part of the wider conflict between Unions and Management in a number of Industries that had affected Britain in the post 1945 World. The bitterness that was created as a result of this Strike lingers on in many former mining communities.

The decline in Coal Production has been huge. In 1970 the consumption of coal mainly for the production of electricity fell from 157 tonnes in 1970 to 18 million tonnes in 2016. 77% of the coal consumed in the U.K. was imported from Columbia, Russia and the United States. This clearly had implications for employment. In 1920 1,191,000 people were employed in mining coal, by 2015 it was 2.000.

What the future of coal production might be is very much open to question. There are so many factors to be considered. It is no longer about the economics of production and profit but much to do equally with environmental factors.

John Hodson.