

Published in final edited form as:

Morgannwg. 2014 ; 58: 71–88.

The South Wales Miners' Federation and the perception and representation of risk and danger in the coal industry, 1898–1947¹

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In February 1914, the South Wales Miners' Federation (SWMF, also known simply as 'the Fed') held a conference to discuss industrial injury and workplace safety in the coal mines. In his speech to the delegates, William Brace, the Fed's president, said that 'while machinery and other measures adopted in the production of coal had enormously increased the output, it was appalling to think that neither the application of science nor anything else appeared to have been able to cope with the terrible disasters in the Coalfield and the serious accidents to workmen taking place in the mines'.² Taking Brace's concerns as a starting point, this paper examines the perception and representation of risk and danger in the coal industry, from the perspective of the SWMF and its members, covering the period from the formation of the SWMF in 1898 through to the nationalisation of the British coal industry in 1947.

Coal mines were an intrinsically dangerous working environment. Between 1885 and 1949, coal mining consistently accounted for about 25 per cent of all occupation-related accident deaths in Britain, sometimes significantly more.³ Within this, south Wales was consistently the most dangerous coalfield in Britain in which to work. Although south Wales produced, at its zenith in 1913, 19.7 per cent of total British coal output, it accounted for between 20 and 30 per cent of total British colliery deaths from the 1870s through until the 1930s.⁴ For the south Wales miners, the risk of death in the workplace was ever-present and the experience of serious and disabling injury was commonplace. In 1937, for example, 175 men and boys were killed and 25,947 were injured in south Wales collieries: these figures occurred despite there being no major disasters of any kind that year.⁵

There were several main hazards for mineworkers in this period. Colliery explosions were all too frequent in south Wales in the nineteenth and early twentieth centuries.⁶ The worst

¹This essay is an expanded version of a paper that was originally given by the author on 6 September 2013 at the European Association for the History of Medicine and Health (EAHMH) conference on 'Risk and Disaster in Medicine and Health', which was held in Lisbon. It has been written as part of the Wellcome Trust Programme Award, 'Disability and Industrial Society: A Comparative Cultural History of British Coalfields, 1780-1948'. It draws on the work of the research team: Professor Anne Borsay, Dr David Turner, Dr Kirsti Bohata, Dr Daniel Blackie, Dr Mike Mantin and Alexandra Rees (Swansea University); Dr Steven Thompson and Dr Ben Curtis (Aberystwyth University); Dr Vicky Long (Glasgow Caledonian University) and Dr Victoria Brown (Northumbria University/Glasgow Caledonian University); and Professor Arthur McIvor and Dr Angela Turner (Strathclyde University).

²SWMF Executive Council minutes, Special Conference, 2 February 1914 (South Wales Coalfield Collection [SWCC], Swansea University, MNA/NUM/3/1/1).

³Arthur McIvor and Ronald Johnston, *Miners' Lung: A History of Dust Disease in British Coal Mining* (Aldershot, 2007), 45.

⁴John Williams, *Digest of Welsh Historical Statistics, Vol. 1* (Cardiff, 1985), 332.

⁵Kim Howells, 'Victimisation, Accidents and Disease', in David Smith (ed.), *A People and a Proletariat: Essays in the History of Wales, 1780-1980* (London, 1980), 184.

mining disaster in British history occurred at the Universal Colliery at Senghenydd in 1913, when an underground explosion killed 439 miners. Such occurrences devastated local communities, although overall most deaths and serious injuries in British coal mining occurred from comparatively small-scale accidents, especially roof collapses, which killed or maimed one or two miners at a time.⁷ The other main dangers were injuries from coal trams, or accidents involving the pit-shafts and pit-cages. During 1912, which was not a particularly bad year for mine-working injuries in Britain at that time, there were twelve explosions causing the death of 461 persons; 591 accidents caused by the fall of roof and sides were responsible for 664 deaths; 73 shaft accidents resulted in 96 deaths and 384 miscellaneous accidents were responsible for 400 fatalities.⁸

Changing technology in mining, particularly the increasing levels of mechanisation as the twentieth century progressed, altered the nature of the risks of working underground. In the SWMF Executive Council's annual report for 1936–7, one of the union's Mines Inspectors said that 'The increasing use of machinery for the getting and conveying of coal has led to new types of accidents.'⁹ Electrical equipment introduced the possibility of electrocution, as well as providing a further potential cause of explosions. Mechanisation also introduced the additional hazard of powerful machinery operating in confined spaces underground. This increased the risk of maiming miners, especially where moving parts of machines were inadequately fenced off. In 1943, the SWMF's Compensation Secretary noted that the majority of claims for damages in common law against the coal owners arose out of the non-fencing of machinery, which resulted in several fatal accidents, as well as amputation of hands, fingers and legs of unfortunate miners who had become entangled in the machinery.¹⁰

Industrial diseases presented another hazard for mineworkers. In the early twentieth century, the main industrial disease contracted by the south Wales miners was miners' nystagmus, a debilitating neurological condition characterised mainly by rapid involuntary oscillation of the eyeballs and caused by poor lighting conditions. By the 1920s, it became increasingly clear that pneumoconiosis – a disease in which the lungs become clogged owing to inhalation of coal dust particles over a period of time – was at least as serious a threat to them. Initially known by the more narrowly-defined term 'silicosis', it did not become a compensable industrial disease until the Silicosis Order of 1928. Once the more broadly-defined term of 'Coal Worker's Pneumoconiosis' was officially recognised in 1943, in response to pressure from the SWMF via the Miners Federation of Great Britain (MFGB), the number of new cases increased dramatically: from 418 in 1939 to 5,224 in 1945 in south Wales.¹¹ Although pneumoconiosis could be found in every British coalfield, it was particularly prevalent in south Wales, especially during the early- to mid-twentieth century. South Wales accounted for over 89 per cent of all new pneumoconiosis cases in Britain

⁶See Trevor Boyns, 'Technical change and colliery explosions in the South Wales coalfield, c.1870–1914', *Welsh History Review*, Vol. 13 No. 2 (1986), 155–77.

⁷Dot Jones, 'Workmen's Compensation and the South Wales Miner, 1898–1914', *Bulletin of the Board of Celtic Studies*, Vol. 29 No. 1 (1980), 134.

⁸SWMF Executive Council minutes, Special Conference, 2 February 1914 (SWCC, MNA/NUM/3/1/1).

⁹SWMF Executive Council Annual Report, 1936–7, 35 (South Wales Miners' Library [SWML], Swansea University).

¹⁰SWMF Executive Council Annual Report, 1942–3, 53–5 (SWML).

¹¹McIvor and Johnston, *Miners' Lung*, 56.

between 1939 and 1945.¹² The SWMF (which became the South Wales Area of the National Union of Mineworkers in 1945) contended that between 1937 and 1948 2,088 south Wales miners had died and 38,449 had been permanently disabled by silicosis and pneumoconiosis.¹³

The south Wales miners were very aware of the dangers inherent in their industry. In March 1919, Vernon Hartshorn, miners' agent of the Maesteg District of the SWMF and Member of Parliament for the Ogmore constituency in Glamorgan, appeared before the Coal Industry Commission chaired by Justice Sankey. Similar to many other witnesses that appeared on behalf of the miners' unions, Hartshorn drew the attention of the Commission to the considerable perils that miners faced in the course of their daily labours. He pointed out that, each year, roughly one in every six miners experienced a disabling injury that was sufficient to keep them from work for seven days or more, and gave moving testimony of men and boys maimed, burnt and killed every working day. Hartshorn continued: 'In the mining industry the casualties are more like those of the battlefield than anything else. The only difference between the soldier and the miner is that the miner can never ask for an armistice. He cannot even treat for terms of surrender. The casualties go on every day'.¹⁴

This type of imagery, of there being 'blood on the coal', was a recurrent motif in the representation by the SWMF of the dangers of the coal industry. Such rhetoric was often put very forcefully. In calling for a reduction in miners' working hours in 1908, for example, Dai Watts Morgan (the secretary of the Rhondda No.1 District of the SWMF) argued that:

The aged workmen, in consequence of failing eyesight and limbs giving way, go in mortal fear, not of their fellow men, but of the haulage ropes and machinery of all descriptions now in use on the roads... If you want to do a real service to these old soldiers of the mine, some of them with mutilated bodies, some minus a limb, all of them having during their time given of the best to build up the coal trade, keep them less hours underground; ample sacrifice has already been made by all such workmen... My grandfather and father have fallen victims to what I would call 'preventable' accidents... [and h]undreds of others have been hurled to Eternity and sacrificed on the altar of 'cost of production'... [A]lmost 1,200 mine workers were fatally injured last year – and that almost 90,000 were more or less seriously injured. This, I take it, is a clear proof of the dangerous nature of the miners' employment.¹⁵

As trade unionists, miners fought collectively to lessen the dangers of coal mining. Nevertheless, though, few questioned the fundamental supposition on which the industry was based – that the business of coal-getting 'naturally' entailed risk, injury and death. On the whole, they accepted – as did their employers – that the taking of risks and constant occurrence of serious accidents underground were part of the 'inevitable' price to be paid for coal. This outlook is encapsulated neatly in a passage from the novel *Cwmardy*, written in 1937 by Lewis Jones, himself a miner from Clydach Vale in the south Wales coalfield:

¹²McIvor and Johnston, *Miners' Lung*, 56.

¹³National Union of Mineworkers [NUM] (South Wales Area) Executive Council Annual Report, 1948–9, 93 (SWML).

¹⁴Coal Industry Commission. Vol. I. Reports and Minutes of Evidence on the first stage of the inquiry, [Cmd. 359], 1919, xi, 2–3.

¹⁵SWMF Rhondda No.1 District monthly report, 25 April 1908 (SWCC, MNA/NUM/3/8/10a).

Len [a boy just starting work in the mines] had been silently listening to the talk [of the other miners]. The men's casual appreciation of the deadly possibilities arising from the timber shortage made him think deeply. He wondered if it were sheer bravery that made the men and boys talk so calmly about the possibility of a horrible death awaiting them in the next few hours. He pondered over this while the men carried on the conversation, and eventually came to the conclusion it was not only bravery that made them talk in the way they did. He felt there existed a callous indifference among them, bred in their knowledge that the pit held their fate in its power and that death and destruction could come suddenly in a thousand different ways. He sensed this feeling in himself, and realised that if he pondered over the possible deaths awaiting him, he would never muster sufficient courage to descend the pit again.¹⁶

Whilst certain fatalism was perhaps a necessary prerequisite for their work, the south Wales miners were nevertheless certain that the coal companies were ultimately responsible for the manifold dangers that they faced in the collieries. In a meeting of the SWMF's Western District in December 1924, John Powell, the chairman, reminded those present that 'The working Collier knows of the competitive madness that is so prevalent in the coalmines of to-day; he knows that the safety of the miner and all other humanitarian considerations are subordinate to the desire of securing a big output. The story [of an accident] does not always commence with a fall of roof: it very frequently commences with criminal negligence on the part of those who have been placed in authority.'¹⁷ Similarly, Bert Coombes, the miner and writer from Resolven, observed caustically that:

The chief things that are required of a fireman [that is, a colliery official] is that he close his eyes on certain occasions and that he always gets as much coal out as is humanly possible. Certainly, he must sign a report book every day, but as the same words are used, he ought to be almost able to do that in his sleep. On the line opposite 'Gas?' he need only write 'None', then opposite 'Timber?' he must put 'Plentiful'. I did hear of a flustered fireman who wrote plentiful on the gas line and none on the timber line, but probably wrote what was the truth for once.¹⁸

The SWMF contended frequently that colliery managements were conducting mining operations in a cavalier fashion, with insufficient regard to safety factors. In 1908, the secretary of the Fed's Rhondda No. 1 District criticised the colliery companies' practice of shot-firing (that is, controlled explosions to loosen the coal in the coalface) whilst the main roads of a colliery were being traversed by the workforce, stating that 'It can only be described as being little short of madness to carry out such dangerous operations as shot-firing when the atmosphere is charged with so highly inflammable a mixture as coal dust has proved itself to be... It is not too strong language to say that such conduct is conducive to inviting these terrible accidents.'¹⁹ At pit level, the most commonly-voiced grievance was that the companies' drive to maximise output and minimise production costs meant there

¹⁶Lewis Jones, *Cwmardy* (compendium edition with *We Live*; Cardigan, 2006), 172.

¹⁷*Colliery Workers' Magazine*, Vol. III No.1, January 1925 (SWML).

¹⁸B. L. Coombes, *These Poor Hands* (London, 1939; new edition, ed. Chris Williams and William D. Jones, Cardiff, 2002), 137.

¹⁹SWMF Rhondda No.1 District monthly report, 25 April 1908 (SWCC, MNA/NUM/3/8/10a).

was insufficient timber to support the roof at the coalfaces. In June 1920, for example, the SWMF Executive Council gave official backing to a strike by miners at Bargoed Colliery, which was supported by miners throughout the Rhymney Valley, agreeing with the miners' contention 'that the practice of drawing timber in the face while Colliers are at work involves an additional and unnecessary danger upon the Collier'.²⁰ Miners' resentment towards the coal companies' attitudes towards their safety is given vivid expression in a section in Lewis Jones's novel *Cwmardy*:

Len and his father were working with many other men on a long stretch of coalface called a 'barry'. During the dinner break, when all the men were gathered together, a discussion started about a shortage of timber from which they were suffering.

'Ay,' said Jim, 'this be the third day. The fireman do know all about it, but not a bloody stick have I seen yet.'

'That's quite right,' interjected Bill Bristol. 'They can't say they don't know nothing about it, because I told the fireman myself this morning. I suppose the sods will not send timber down till we are all buried.'...

Will took up the discussion. 'That be true. The whole rotten barry be on the move now, and once this top do start to work nothing in blue hell will give us time to get out before we are all squashed flat...'²¹

Miners were often quite suspicious of the introduction of new technology in the collieries by the coal companies. Whilst resistance to change was probably a factor, they were also concerned that it introduced inherent new risks and was also being implemented with insufficient regard to safety factors. In May 1919, for instance, miners at Bedwas Colliery struck in protest at the installation of mechanical conveyors there, as they contended that the management was not operating them safely.²² This general situation was exacerbated in the 1920s in south Wales, as colliery companies' attempts to increase mechanisation became embroiled in the rising industrial relations tensions of that period.²³ Furthermore, the companies that were keenest to extend mechanisation also tended to be the most obdurate towards the miners – the Powell Duffryn Steam Coal Company, the largest coal company in south Wales and Britain as a whole at that time, is the best exemplar of this phenomenon. Bert Coombes gives a clear sense of how coal-cutting machinery affected the working environment at the coalface:

Very soon the management started to pit the machine against the men. There was a speeding up in all the jobs... Every day was an emergency. The officials would be behind the colliers everyday hurrying them to clear the coal, else they would delay the machine, then they would hurry back to warn us to hurry up, or the colliers would be clear and waiting for coal.²⁴

²⁰SWMF Executive Council minutes, 7 June 1920 (SWCC, MNA/NUM/3/1/1/).

²¹Jones, *Cwmardy*, 171–2.

²²SWMF Executive Council minutes, 31 May 1919 (SWCC, MNA/NUM/3/1/1/).

²³See Trevor Boyns, 'Of Machines and Men in the 1920s', *Llafur: Journal of Welsh Labour History*, Vol. 5 No. 2 (1989), 30–9.

²⁴Coombes, *These Poor Hands*, 76.

In contrast, miners could be enthusiastic about the introduction of new technology if they felt that it would improve workplace safety. In 1919, for instance, miners from Tirpentwys Colliery complained to the SWMF Executive Council that they ‘desired a change from Oil Lamps to Electric Lamps for use at this Colliery’, on the basis ‘that the Oil Lamps did not give sufficient light, and were injurious to the workmen’s sight’, subsequently threatening to strike if the colliery management did not concede to this request.²⁵

The SWMF was quite prepared to take legal action where circumstances necessitated against colliery companies for failure to fulfil their safety obligations. Following the explosion at Milfraen Colliery in September 1929, for example, the SWMF decided upon an action of Common Law against the colliery company for breaches of the Mines Act, following the company’s failure to make the improvements to the ventilation system at the colliery that had been recommended by the Inspector of Mines.²⁶ In a similar vein, the 1932 SWMF Annual Conference carried a resolution which called for miners to have the right to prosecute the management for breaches of regulations, whilst the resolution on safety at the National Union of Mineworkers Annual Conference in 1946, which was moved by W. J. Saddler, a south Wales representative, called for a new system of inspection reports giving miners the right to inspect the pits at any time and the right of the workmen to prosecute a colliery company for negligence.²⁷

In addition to the declamatory rhetoric which blamed the coalowners for all the dangers which the miners faced in their workplaces, a quite different approach was simultaneously discernible in the work of the SWMF. Here, danger was perceived and represented as a problem to be overcome via negotiation and discussion, informed by experiment and observation. Although a powerful and relatively militant trade union, which was not averse to industrial relations struggle against the coal companies, the prominent position of the SWMF as the union of the south Wales miners meant that it was also the main vehicle effecting incremental improvements in the safety of their working environment.

The SWMF took an active role in helping to ensure day-to-day workplace safety. In accordance with the provisions of Section 16 of the Coal Mines Act (1911), the Fed established its own system of lay Workmen Inspectors to examine working conditions in the mines. This system was improved in the mid-1930s with the appointment by the union of two full-time Mines Inspectors.²⁸ These investigated miners’ complaints about safety issues and worked to ensure a higher standard of safety in the industry. Their reports, published as part of the SWMF Executive Council’s Annual Report, give an extensive and detailed insight into the particular risks which were most pressing in the minds of the south Wales miners at any point in time.

Conferences were the main means by which the SWMF discussed safety matters and how best to minimise the risks of working in the industry. Occasionally, conferences were convened specifically for this purpose – such as the two-day event which was held in

²⁵SWMF Executive Council minutes, 24 February 1919, 9 April 1920 (SWCC, MNA/NUM/3/1/1).

²⁶SWMF Executive Council minutes, 23 September, 26 October, 16 November 1929 (SWCC, MNA/NUM/3/1/1/).

²⁷SWMF Executive Council minutes, Annual Conference, 22–3 November 1932 (SWML).

²⁸SWMF Executive Council Annual Report, 1935–6, 22 (SWML).

February 1914. Numerous resolutions aimed at improving workplace safety were also a perennial feature of the annual conferences of the SWMF. To take just one example: the 1923 SWMF Annual Conference passed resolutions demanding, amongst various other safety measures, '[t]hat the Government be asked to introduce regulations making it compulsory to use lock shackles on haulage roads', '[t]hat Stone-Dusting in the mine should take place only between shifts, and... that the Government be asked to appoint a Committee to inquire into the whole question of Stone-Dusting' and also '[t]hat the most modern Electric Lamps be installed at all Collieries for working purposes, with sufficient Oil Lamps for safety purposes'.²⁹ It is important to note that these resolutions were not imposed on the Fed's membership by the leadership but instead permeated up through the union's structure, being proposed by the colliery lodges in response to the workplace experiences of the miners themselves.

Such resolutions provided the basis for SWMF campaigning for reform. One of the main ways in which the miners sought to bring about these improvements in safety and working conditions in their industry was via participating in the deliberations of the various Royal Commissions on Safety in Mines which were held periodically throughout this period. In order to be effective, such submissions needed to present convincing evidence and offer practical and practicable solutions to the problems outlined. A reasonable degree of success in this respect was achieved by the miners. As the Fed's Executive Council informed the membership in 1938–9, 'The Royal Commission on Safety in Mines has submitted its report, and while it has not adopted all the recommendations of the Federation it has recommended a number of improvements which, if embodied in new legislation and regulations, will reduce the danger inseparable from coal mining. The Executive Council... will maintain its vigilance in connection with any new legislation arising from the Report.'³⁰

One of the main safety concerns of all mineworkers was to prevent colliery explosions, which occurred through the accidental ignition of 'firedamp' gases and coal dust particles. Consequently, the SWMF was keen to learn the lessons from any disasters which occurred, with the aim of avoiding them in future. Following the explosion at Wernbwl Colliery, Penclawdd, in 1929, for instance, the Fed's Executive Council pressed the government's Mines Department for an experiment to be carried out upon the ignition of coal dust by acetylene lamps, which were used in some collieries in south Wales. Subsequently, the EC representatives discussed the results of this experiment with the Inspector of Mines.³¹ From about 1914, some south Wales colliery companies made increasing use of stone-dusting as a means of reducing the risk of underground explosions.³² Although – having observed various Mines Department experiments – conceding that stone dusting was an effective measure in this respect, the SWMF remained concerned about the impact of inhalation of stone dust upon the health of the miners.³³ During the 1920s the Fed's Executive Council

²⁹SWMF Executive Council minutes, Annual Conference, 18–20 June 1923 (SWCC, MNA/NUM/3/1/1).

³⁰SWMF Executive Council Annual Report, 1938–9, 36 (SWML).

³¹SWMF Executive Council minutes, 7 December 1929, 10 February 1930 (SWML).

³²Trevor Boyns, 'Technical change and colliery explosions in the South Wales coalfield, c.1870–1914', *Welsh History Review*, Vol. 13 No. 2 (1986), 175.

³³SWMF Executive Council minutes, 12 February 1916 (SWCC, MNA/NUM/3/1/1).

frequently sent representatives to observe government experiments into alternative measures to suppress dust.³⁴ As one of the SWMF's Mines Inspectors commented, 'Stone dusting of the underground roads undoubtedly prevents the spread of an explosion, but we must seriously consider whether this does not give rise to a greater evil than the one it seeks to prevent. The rigorous cleaning up of dust on the roadways would, in my opinion, be much better than the application of stone dust.'³⁵

The SWMF was also keen to share 'best practice' and research findings that would help to making coalmining safer. To provide a few examples: in March 1932, south Wales miners' representatives attended a safety conference organised by the Mines Department, and in 1943–4 the SWMF's Mines Inspectors held a series of safety lectures in Swansea, Port Talbot, Ystradgynlais and Pontyberem, at which the Lodge Examiners from the various collieries attended.³⁶ Industrial diseases were also discussed. In 1923, for example, the SWMF sent representatives to a conference in Swansea, organised by the Institute of Engineers, upon the question of miners' nystagmus, subsequently pressing the Mining Dangers Research Board to support further research into the disease.³⁷ Similarly, in January 1947, South Wales NUM representatives participated in a conference convened by the Ministry of Fuel and Power to discuss pneumoconiosis, alongside representatives from the National Coal Board, government and medical experts.³⁸ Additionally, the SWMF Executive Council received deputations on a fairly regular basis of individuals who had invented devices to improve some aspect of mines workplace safety, with the Executive Council subsequently recommending that the best of these be incorporated as part of standard practice in the pits. At one Executive Council meeting in June 1917, for instance, three different inventors gave demonstrations of their various inventions to prevent runaway trams, after which the EC resolved '[t]hat the attention of the Home Office authorities be called to the loss of life and injury caused to workmen by runaway trams, and the very many inventions there are available of safety appliances[,] which we are of the opinion should be examined and tested, and the use of approved types made compulsory at all Collieries'.³⁹

Of course, in practice the SWMF did not maintain a rigid distinction between dramatic rhetoric and blaming colliery companies for dangerous occurrences in the mines on the one hand and using reasoned debate and negotiation to press for improvements in working conditions on the other. This can be seen clearly with reference to the Fed's campaigning work against pneumoconiosis.

Pneumoconiosis was a subject which provoked strong opinions amongst the south Wales miners. References to 'the seriousness of the dust menace', which caused 'misery and suffering' to miners and their families, were commonplace in any discussion of this subject by them.⁴⁰ In 1936, a campaigning journalist with the *Daily Chronicle* newspaper published

³⁴SWMF Executive Council minutes, 8 May, 4 June, 16 July, 13 October 1923, 21 October 1924, 28 January 1925 (SWCC, MNA/NUM/3/1/1/).

³⁵SWMF Executive Council Annual Report, 1938–9, 51 (SWML).

³⁶SWMF Executive Council minutes, 19 February 1932; SWMF Executive Council Annual Report, 1943–4, 26 (SWML).

³⁷SWMF Executive Council minutes, 8 May 1923 (SWCC, MNA/NUM/3/1/1/).

³⁸*The Miner*, Vol. III Nos.4 & 5, February/March 1947 (SWML).

³⁹SWMF Executive Council minutes, 25 June 1917 (SWCC, MNA/NUM/3/1/1/).

⁴⁰*The Miner*, Vol. III Nos. 1&2, November/December 1946 (SWML).

– with the approval and assistance of the Fed – a series of articles outlining the extent and scale of the disease in the south Wales Coalfield. The aim was to both inform and shock the general reader. One of these articles stated: ‘This is the country of premature old men. You see them everywhere – bent, shuffling, panting for breath at any age between 35 and 50.’⁴¹ Similarly, Zweig, in his 1948 study *Men in the Pits*, commented that ‘Nowhere else can you see the same relative numbers of disabled men as in a colliery village’. From his conversations with miners, he concluded that, in the men’s opinion, ‘enemy number one in the pits is dust’.⁴² In the late 1930s one of the SWMF’s Mines Inspectors reported that: ‘In addition to the danger to health, there can be no doubt that exposure to dust is having a marked psychological effect upon the Anthracite miner. The haunting dread of silicosis is general, and I find the men exceedingly jumpy and nervous where dusty conditions prevail’.⁴³ During 1935 and 1936, for example, the miners of Great Mountain Colliery threatened strike action on several occasions, as a result of excessive dusty conditions prevailing there and what the workmen alleged to be the failure of the colliery management to take appropriate steps to remedy this situation.⁴⁴ Even the SWMF leadership was not averse to making bold and accusatory public statements on the subject. In January 1936, the *Western Mail* reported that:

The allegation that the coalowners were spending large sums of money for the sole purpose of defeating the intentions and purposes of the Compensation Acts so as to deprive men and their families of the rights of compensation, was made by Mr Evan Williams, J.P., the general compensation secretary to the South Wales Miners’ Federation, speaking at Glynneath on Thursday night.

Mr Evan Williams said that the owners’ professed concern about the incidence and accidents in the mines was highly hypocritical. The terrible scourge of silicosis which was rampant in the mines was a matter on which the public conscience ought to be aroused and the owners should be compelled to apply themselves to the prevention of the disease rather than to expending the money of the industry to deny the rights of compensation.⁴⁵

For the SWMF, these kinds of pronouncements coexisted easily alongside the diligent and persistent business of pressing for further research into pneumoconiosis and the implementation of new techniques and technologies to minimise the impact of the disease. It was as part of this approach that the Fed supported and co-operated with the establishment by the Medical Research Council of the Pneumoconiosis Research Unit in 1946, at Llandough Hospital in south Wales. Although motivated by the same desire to eradicate pneumoconiosis, the terms of debate within this discourse were necessarily posited very differently. In October 1935, for instance,

Evan Williams, Compensation Secretary, reported [to the SWMF Executive Council] upon the Area Conferences that had been held to consider that steps could be taken to reduce the causes of Silicosis. The Conferences were of an excellent

⁴¹*News Chronicle*, 18 February 1936.

⁴²F. Zweig, *Men in the Pits* (London, 1948), 6, 118.

⁴³SWMF Executive Council Annual Report, 1938–9, 44 (SWML).

⁴⁴SWMF Executive Council minutes, 23 July, 27 August 1935, 11 February, 10 November 1936 (SWML).

⁴⁵*Western Mail*, 31 January 1936.

character, and quite businesslike, and recommended... that proposals be formulated with the view of preventive measures being applied. Some of the proposals mentioned are –

- (1) Use of water.
- (2) Cleaning of roads.
- (3) Dust traps.
- (4) Improvement of ventilation.
- (5) Tightening up of regulations relating to Shot-firing.
- (6) Inquiry into the methods of Stone dusting.

It was pointed out that these matters could be dealt with in conjunction with the present action being taken... in seeking a revision of the Coal Mines Act.

The Executive Council subsequently resolved 'That the recommendation of the Conferences be adopted, and that Mr Evan Williams be authorised to proceed with the matter and obtain the necessary information.'⁴⁶

This combination of agitation and negotiation within the campaigning work of the SWMF regarding pneumoconiosis proved to be quite successful. Largely as a consequence of pressure from the union, for instance, various improved water-based dust-suppression technologies began to be introduced into the industry from the early 1940s. By the 1950s, these had played a central role in significantly reducing the incidence of pneumoconiosis. In south Wales, for instance, the number of new cases fell from 5,224 in 1945 to 1,088 by 1956.⁴⁷

The harsh working conditions in coal mines inevitably inculcated a workplace culture where risk-taking was accepted and even encouraged. 'Wherever a job or task involves risk-taking and the possibility of violent death, codes of behaviour emerge which will contain passages dealing with bravery, cowardice, manliness, skill, toughness and strength. Coalmining abounds with such codes, and they were understood, interpreted and reapplied by management, often in a perceptive and highly successful fashion, to maintain or increase the productivity of pitmen'.⁴⁸ In pits, as in all other workplaces, workers sought shortcuts and the means of earning more money in less time and for less effort. Pit safety rules were bypassed and broken as often by miners as by management. In June 1938, for example, three miners from Elliot Colliery in the Rhymney Valley were discovered by a Mines Inspector to be working in their headings with insufficient timbering to support the roof and were subsequently fined between ten shillings and one pound each by the local magistrates.⁴⁹

The taking of risks by miners should be viewed in context, however. One of the main causes of such transgressions was the system of work and payment which the coalowners operated

⁴⁶SWMF Executive Council minutes, 15 October 1935 (SWML).

⁴⁷McIvor and Johnston, *Miners' Lung*, 56.

⁴⁸Howells, 'Victimisation, Accidents and Disease', 192–3.

⁴⁹Howells, 'Victimisation, Accidents and Disease', 191–2.

in their pits. Low price lists, piecework, conveyor speed-ups and the competitive ‘stent’ encouraged men to cut corners and to take risks. These measures were frequently augmented by threat of dismissal if men refused to work in conditions which contravened the legal safety requirements. As the *Colliery Workers’ Magazine* argued: ‘The low wages paid in the industry [mean that]... too often the workman, especially the piecework collier, will take some risks in the anxiety to improve his meagre wage – risks which he otherwise would avoid.’⁵⁰ Similarly, the miners’ leader A. J. Cook told a Court of Inquiry into conditions in the mining industry in 1924, ‘Men’s minds should be concentrated on their jobs... instead of having to worry about paying shop and rent bills, and shoes for their little children. Low wages always increase the danger in the industry.’⁵¹

The situation was further complicated by the fact that miners were sometimes opposed to ‘increased safety’ if they felt that employers were taking advantage of this at their expense. In 1935, for instance, the SWMF opposed the practice by some colliery companies of making the use of safety equipment such as helmets and gloves mandatory and then charging the workers for the supply of these items.⁵² Similarly, but contrary to the official advice of their union, following the introduction of electrical lamps in the mines, some miners refused to also carry flame detector lamps or gas detection equipment, on the basis that there was no extra pay for doing so.⁵³

There also existed a contrast between the risk-taking codes of behaviour conditioned by circumstances in the pits and the safety-conscious trade union ethos of SWMF. The Fed was aware of this and worked consistently to instil a greater awareness of safe working practices amongst its membership. In the first issue of the SWMF newspaper, the *Colliery Workers’ Magazine*, in 1923, it was noted that ‘The Chief Inspector [of Mines], commenting on the large number of Haulage Accidents [there were 53 such fatal accidents in south Wales in 1921], expressed the opinion that in some degree they are due to – “Exercise of zeal in getting on with the job without due regard to Safety First”.’⁵⁴ Short stories which appeared in the miners’ magazines could serve a similar didactic purpose. In ‘Caught’, published in 1923, a miner rashly disregards a warning signal and is consequently fatally crushed by a journey of trams.⁵⁵ Similarly, in ‘The Ninety-Third Element’ (a reference to the ‘human element’ in mining accidents), published in 1945, a young miner’s reckless behaviour accidentally causes the death of his own father.⁵⁶

One area where this contrast in attitudes between the official SWMF viewpoint and the ‘ordinary’ miner at work at the coalface was most in evidence was in the SWMF’s Mines Inspectors’ annual reports. In 1936–7, for instance, one inspector said that ‘It is reasonable to suppose that if the Regulations in regard to machinery in motion had been observed, [most machinery-related accidents]... would not have happened. It cannot too often be urged on our men not to touch any machinery while it is in motion.’⁵⁷ Similarly, in 1948–9,

⁵⁰*Colliery Workers’ Magazine*, Vol. III No. 2, February 1925 (SWML).

⁵¹*Colliery Workers’ Magazine*, Vol. II No. 5, May 1924 (SWML).

⁵²SWMF Executive Council minutes, 1 April 1935 (SWML).

⁵³NUM (South Wales Area) Executive Council Annual Report, 1946–7, 93 (SWML).

⁵⁴*Colliery Workers’ Magazine*, Vol. I No. 1, January 1923 (SWML).

⁵⁵*Colliery Workers’ Magazine*, Vol. I No. 10, October 1923 (SWML).

⁵⁶*The Miner*, Vol. I No. 5, February 1945 (SWML).

another Mines Inspector commented that ‘the greatest single cause of death is still falls of ground, and... many known precautions are not taken. All roof, whether it appears strong or not, should receive positive support, this cannot be too often stressed... Compliance with the Mines Act, and the exercise of common sense, would go a long way in reducing the number of fatal accidents.’⁵⁸

Danger was an inescapable part of the working experience of miners in the south Wales coalfield in the early twentieth century. Consequently, workplace safety in the mines was partly based on statutory definitions of what constituted ‘safe’ practice (which themselves evolved over time), but was also the outcome of the industrial relations struggle between miners and employers. Working practices in any given colliery operated on the basis of what was deemed an ‘acceptable’ level of risk (definitions of which varied, according to perspective), within the context of the continuous pressure to maximise output. Miners generally accepted the risk of death or disablement, while simultaneously asserting that the coal companies were ultimately responsible for the hazards that they faced. Within this framework, the SWMF worked consistently, via a range of expedients and strategies, to reduce the elements of risk and danger of work in the mines – sometimes in conscious opposition to the working practices of some of its members.

Biography

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⁵⁷SWMF Executive Council Annual Report, 1936–7, 35 (SWML).

⁵⁸NUM (South Wales Area) Executive Council Annual Report, 1948–9, 95 (SWML).