CHAPTER II

Recognized union firm – Four main Printing Processes – Militancy – Local newspapers – Colour Masking - Klishographs – Dr Hell – Letterpress – Jobbing Printers - Web-offset – Wage rates – Robert Maxwell – Rupert Murdoch – Rotary Scanners – Page-planning – Newspapers.

This was a union firm and within their staff were some of the key national and branch trade union officials - those who attended all the meetings, became the officials and dominated how the union dealt with the industrial changes taking place.

These changes were not just about trying to entice work back to the United Kingdom. It was more about trying to halt the decline in the printing industry as a whole. Nor was it about faster production methods - introduced by film companies and makers of various printing machines. The chief changes affected a whole process, letterpress printing… the reproduction of pictures and type could be done faster and cheaper by Lithography using a more versatile printing surface and page make-up system. Letterpress continued using stereotype processes.

Type matter, since Gutenberg's invention in the middle of the fifteenth century, needed a raised metal image. Each previously formed letter being set in a stick to make up a line of type. Along came hot metal typesetting which is the process used prior to photographic processes to form a line of type. Newspapers need to change their printing surfaces rapidly to cater for the latest story. When letterpress was the chief production method, it used hot metal to set the type and blocks to make the pictures. These were set and clamped into a forme, which made up the printing surface. In comparison with photographic typesetting, it is a slow, laborious and expensive.

About this time, newspapers began to change over from letterpress to lithography - longer printing runs made possible by new printing plate surfaces. It was cheaper to use a thin, previously light sensitive coated, lithographic printing plate - could be quickly altered if necessary, rather than making up a new letterpress forme, with all that that entailed.

Letterpress firms were closing down men paid off – many going bankrupt. All those skilled men in the newspaper industry had earned high wages, now unemployed. The Photogravure industry could not take them all nor could Litho. The unions whose job it was to find places of work, for their members, filled vacancies in Litho, organizing retraining at printing colleges. Many had to retire or find other work. Those who made their way into lithographic industry had to become used to working with film rather than metal. Some had been operating typesetting machines or making up black and white pictures into blocks. Now they had to learn about colour printing and understand the reasons why colour correction necessary. Apprenticeships were stopped - to add another place of work to fill and a rota for how many men to those under training reviewed. Overtime banned to create more work. All these stop gap methods to retrain, distribute labour and cushion changes in the industry were all short term. What it did do is make the whole business uneconomic forcing advertisers to seek work abroad.

These changes in working arrangements continued for years - the unions continued to put a block on accepting new apprentices until all the unemployed were given jobs to the extent that soon there were few young people in the trade. Overtime was heavily restricted and new working arrangements negotiated with the owners. Militancy reared its ugly head and those workers who spoiled for a fight had a field day. The unions still negotiated an annual wage review, which always resulted in higher wages, shorter hours and longer holidays. Strikes were threatened and an overtime ban implemented. Gradually, the work taken abroad stayed there and managements sought to find a

way out of the impasse – the trade was becoming uncompetitive. Those firms who supplied the trade with parts of the final process started to feel the pinch and many went out of business.

The major film manufacturers competed to bring out a method of colour correction prior to halftone screening. The first photographic correction systems used a series of continuous tone, film overlays, to correct the ink deficiencies. This was followed by a double overlay masking system. Later, another system used a single multi-layered masking film strapped to the original colour transparency - flat copy originals - watercolours and oil paintings, converted to transparencies allowed this to happen. All these systems were introduced to reduce the amount of hand work necessary. Eventually a film system devised that completely obviated the need for more correction… but it was too late… electronic scanning saw to the demise of film correction.

It was during the 1970s that local newspaper unbound by the restrictions their brother printers locked into for national newspapers began to be printed using a web-offset printing machine – using a reel of paper rather than sheets. Later, these papers were printed in colour well before the nationals began colour supplements.

Klishographs, invented by Dr.Hell - mechanically produce, an engrave halftone image that could be printed - to take the place of a halftone block. This machine was highly successful. Later on, the machine was adapted for colour separation work and given the name of Vario to differentiate it from its brother. The Vario was a flatbed scanner using the latest electronic scanning techniques of lasers and filters. The computer was programmed to separate the transparency into the four printing colours - including black, correcting the three primary ink colours magenta, cyan and yellow for their spectral deficiencies, whilst at the same time producing a halftone set of images ready for printing down to machine plate. Enlargement or reduction made - to suit the customer's requirements, on a set of plastic foils - contacted for platemaking. The object was to make the film companies, the camera operators and colour retouchers redundant thereby reducing costs and speeding up the flow of production.

At the monthly union meetings scare stories prevailed -promulgated the demise of handwork. It was obvious that computer generated colour corrected halftone screen work plus typematter, would rapidly reduce the number of workers in pre-printing departments. Newspaper owners talked about producing colour inserts. The workers knew this would become eventually, by stealth, full-bloodied colour magazines.

Provincial newspapers based in the Midlands were using the lithographic process. The factories had been purpose built to take the new web offset presses. The simpler page make-up system for the lithographic process was far quicker and cheaper - to keep the publications current with the latest news - the aluminium plate convenient, lighter and quicker to change. It was obvious that eventually national newspapers would join the exodus away from letterpress once they had negotiated with the unions. To make this change come about the massive old letterpress machines had to be moved out – the process and handling of film being totally different from metal. The photogravure process, already operating reel fed printing machines contemplated that they too might be capable of producing newspaper – particularly the supplements which could be produced days before the final machine run - for daily newspapers. However, the industry knew the costs would be prohibitive. The unions pressurised the newspaper owners telling them that new employment deals would have to be negotiated stimulated the newspaper magnets to devise a radical scheme to bring this change about without informing the printer's union…!

None of the changes in technology affected lithography to the extent that warranted such scares - promote mass unemployment. It all came about very slowly. What did undermine the *status quo for me* was the demise in M & J's profitability. Too many jobs were going wrong, standards of reproduction were deteriorating and production times not met. I could see that it was only going to be time before the final collapse of the firm. The enlarged staffs, now made up of newly trained

men, were not capable of doing the job properly, to the times estimated. With that thought, I had to consider what to do and where to go… I scanned the vacancy lists…

It was not long before I saw a vacancy for a firm, which was only just down the road at Wharf Road, Islington - a firm of general printers who wanted a retoucher. As usual, there was only a 'one man one job' - 'white card', sent out… that meant, you had the job if it suited… It did not matter what the firm thought of you - if you had a bad name in the trade, they had to accept you. Quite often strong union supporters - activists, had a bad name and employers refused them jobs. This was the method used by the unions to make employers take on unwanted workers.

I landed the job at the printing house of W. R. Royles & Sons, Wharf Road, Islington. They are a family run business producing greetings cards and stationary. I went there after a period of years working at two of London's leading firms of Trade Platemakers [Trade Platemakers usually convert the original artworks and typematter for printing – those conversions make-up the pages of books, periodicals, newspapers, magazines and greeting cards. These patched and planned films, attached to foils… exposed to light sensitive machine plates… ready for printing and finishing]

Here was a family business making most of its profits producing greetings cards. The fact that their reproduction department might be unprofitable did not matter. They were profitable by holding the original artworks 'rights' - they bought them from the artist. By owning the 'rights' the firm could produce that artwork in as many ways as they could think of - from card to print, wrapping paper to place setting, from private speciality stationary to box making. One artwork incorporated into another, reversed, reduced or turned upside-down. The versatility was endless… they held a library of colour corrected, separated, sets of films… with the costs of the original separation and correction covered… thereafter the job was free of further reproduction expenses – capable of being re-planned, to fit a new layout.

When I went to work there, the owner's sons were just beginning to be trained to take over the business. Each of the sons took up a different side of the industry from sales to reproduction onto printing and naturally, they meant to make their mark.

My second job was the company's first print. At that time most of their work was in six colours. The three primary pigment colours, yellow, magenta and cyan, plus black, was overprinted with pink and light blue to back up any colour deficiencies and give weight. It expected that their prints follow the same procedure, with perhaps a seventh special colour.

I do not think that the management were prepared to see such a close reproduction by the use of a then conventional masking method - it was a revelation to them. When the final job was completed, they were very pleased. The management could see that here was another profitable line of work to exploit making 1970 the start to their production of large prints…

From that day to the present, W. R. Royles have continued to produce prints in a variety of sizes - reproducing oil paintings, watercolours and acrylics. All the reproductions photographed using a studio camera - photographing straight from the original painting through the colour correcting masking film to produce the separation negatives, which in turn screened to produce a printable image in positive. It was a pity that this firm never really appreciated how close a perfect reproduction could be made of original artworks, especially watercolours, by using conventional masking methods. The pigments and papers used by the artist were so close to the spectral measurements of good quality printing inks and paper.

Print unions have always used the term 'chapel' to describe their in-firm or print-house members. This term derived from the original meeting place – a religious house, where printing carried out. Each member of the SLADE & PW Union was attached to a particular firm belonged to that chapel and had to work to the union rules as well as certain in-house working practices.

A very strict routine was observed whereby each member in turn was expected to attend monthly head office union meetings and then to report to the chapel. The chapel secretary kept

detailed minutes, which were agreed in the proper manner adopted by a well run meeting. It was normal that all the offices of the union taken in turn - that no one could absolve himself from the decisions made.

Every meeting whether held at head office or local chapel was officered and run according to the wishes of a certain clique of activists – they may have been socialists, left wing labourites, Marxists or unionists… a few were genuine seekers after better conditions for workers, some only concerned with power which allowed them to incite others which in turn gave them even greater authority, others were fearful of losing their jobs - through the power of the group they felt less threatened, and others were born dramatists - wanted centre stage, with an audience. Whatever, they were not interested in producing the best job in the fastest manner for maximum profit. They did not see that it was in their interest to maximise the production process. Neither the workers nor their representatives knew the state the firm's books - how the economy of the business running, whether the firm was competitive with overseas markets, how the industry standing up to new production methods or country faring economically. Their thinking was purely day-to-day and perhaps week-to-week. Planning for the future to cover new technology or to consider making the firm more profitable was out of the question. Any sort of fraternisation with the management frowned on and any suggestion from the shop floor to assist management to seek a way round problems frowned on.

Wages, hours, holidays and conditions of work fought for in the annual round of negotiations, which at times were protracted and bitter. They could end up with an overtime ban and possibly a strike. When it came to a strike, every method used to force the issue to the extent that artworks were lost and equipment damaged. As the weeks went by trouble makers demanded that the firm should go bust rather than we the workers should give way. There was no sympathy shown for a firm who was finding it difficult to make ends meet. For a start, the workers never believed it and secondly half wished it were true so that the management could experience what it was like to be a worker without a job.

At a chapel meeting I attended, the union representative - father of the chapel, threw his wage packet onto the table asking to see everyone else's. Eventually he got them all and on opening them up displayed what was in them. The meeting discovered that there was no difference between any of them – they were all paid the same. This went down badly... some of the workers believed they had been paid more than others because they were harder workers or were given the most difficult work. The management were playing one worker off against another giving the impression they were being selective when in fact they were being devious. The result was a greater solidarity against the management and the activists given a stronger voice.

In 1971 the Technical Director, Jeremy Royle, introduced the Vario Klishograph. The original Klishograph design had been devised for letterpress – to scribe black and white screened foils for block making. The Vario, as its name suggests, was capable of colour and monotone separations. The reciprocating machine, one side scanning the copy the other scribing the foil, was the invention of Dr Hell of Germany. It was a marvellous machine capable of producing excellent separations which unfortunately had to be contacted to film for platemaking, its only drawback. Jeremy was a keen advocate of perfect balance when adjusting the monitoring for black and white and colour television. He devised test cards and slides to register whether the TV cameras had been set up correctly. This concern for perfect continuous tone balance reflected in his interest when working the scanners.

The Vario's true value was hidden from the management. Workers conspired to slow-up every part of the production line deciding between them what time they should take for each job – usually decided by the size of the job. This could only take place in a firm, which made a profit by selling the completed job. In businesses where the firm produced part of the finished product a much

stricter check could be made of what each man was doing. In such firms, there was also a willingness to undercut others in the same business to bring in more work. When a new machine or process was being introduced into a firm by the manufacturers very great care was taken to work not only in accordance with the manufacturers guide lines but to take extra special care and time over each part of the operation – to slow it down. It was clear to the workers that the new process would reduce the amount of time taken on the job – making workers redundant. They decided to made sure a problem experienced working the new method would demonstrate to the management that the new process demanded almost as much time as the old. The contacted separation sets were heavily retouched to demonstrate the need for hand work. This happened when rotary scanners introduced – it was never admitted how revolutionary the Vario was - or how efficient. The time taken on each job using the machine estimated by the chapel - to guarantee worker's jobs. The purchasers of print and the advertisers within them would not know the difference between one process and the other. That a revolution was about to happen was held back – the workers allowed outdated methods to prevail, even though, in time, the industry almost collapsed…

The run-down of the industry was caused by workers who were greedy - manipulated the easy pickings, when they should have been looking to the future… knowing that new technology about to be introduced would draw more work to itself. 'The Media' bosses whether film, television or print, make vast profits… workers saw what was happening and demanded more… the public and advertisers inadvertently provided the rich pickings for the newspaper owners. The workers did have a point. There would be a reduction in labour and separation sets would be finished quicker. These new techniques could be adapted for the introduction of coloured newspapers.

It was very unfortunate that the management, and I suppose the film companies, were not aware that conventional multilayered masking systems – both Agfa Gævert and Kodak, were equally efficient – fast and cheap. Both these systems could be used to correct multi planned transparencies and the result from original watercolours equally as good as a scanner.

Robert Maxwell 1923 - 1991, operated a price cutting business aimed at the colour reproduction side of the printing industry - to introduce colour to his magazine publications. Eventually he bought the Mirror Group, from Reed International, which later became the massive International Press Corporation. Ruthlessly cutting costs, he introduced run-of-print colour printing - using a four-colour printing press to print his newspapers. This broke the hold imposed by the unions who were trying to force the newspaper managements to renegotiate wage rates and conditions. The move away from Fleet Street to Wapping by the newspaper industry, the engaging of electrical workers who were to run the machines, the introduction of the colour supplement and the total change to lithography by the old letterpress industry, all these new technical advances bought about a revolution in the production of print. The battered, entrenched and belligerent unions tried to turn the tide imposed by new technologies. The unions were never long-term players in developing their strategies, always forced to consider day-to-day relations with the printing house owners.

Within all these machinations, I was trying to reduce the financial pressure of a large family. Having the future in mind, I applied for the position of Reproduction Manager at Rupert Murdoch's The Times newspaper then based at Wapping, to run the new colour reproduction department. It was going to be equipped with the latest scanners and page planning systems… to set up a department to print The Times colour supplement magazine. After a lot of meetings and discussions I got the job only to be told shortly afterwards that it was all off, cancelled, the unions were not going to negotiate. Times Newspapers were completely blocked in their quest to bring in colour as managers and men disagreed over the introduction of computerised techniques. The Times supplement was taken to Holland to be reproduced and printed. Much of the colour printing for the UK was being done abroad to produce a cheaper, more economical product.

It was apparent that Britain was being left behind in the use of robotics and microelectronics. Most of the large printing machines at that time were made in Germany. Scanner manufacturers did penetrate further afield - to Japan, Israel and America, having started in Germany… in Britain we had the Chromograph.

Ultimately national newspapers and to a lesser extent other large printing concerns gave way under threats of unofficial action by in-house chapels. Industrial relations had been bad for generations there was discontent and confrontation at every annual wage review. Strikes abounded and the government of the day incapable of holding down wages or stemming the high unemployment rate.

At the time one strike, which lasted for weeks, I found I had to sell some family heirlooms given to me by an Aunt, to make ends meet. I was desperately short of money for the mortgage. Sally contemplated asking her mother for a loan, which I was not at all keen on her doing. Fortunately, the strike was called-off - abandoned, without any benefit to the unions other than false promises from the management, which they knew they could not keep.

The Wilson government gave way to Heath's election and the eventual three-day working week after the power workers industrial action. Wilson was again re-elected. Callaghan took over after two years and Thatcher's conservatives emerged after only three years to try to stem the international trade recession. Unemployment doubled, de-industrialisation continued and inflation soared.

I was invited, shortly after the collapse of the job at Times Newspapers, to be the new reproduction manager at Royles. This I was pleased to accept. I had to inform the staff what was to happen. When I told the union representative, who was a well-known union activist, what was to take place he said that he would bring out all the workers if I went ahead – knowing that I knew all about the way jobs were being held up and made to be more difficult than necessary. With that, I went down to the works manager and told him saying that unless he backed me I would not take on the job. He could see that it was a hopeless situation and that they were stuck with the existing working relationship. He took on the job himself asking me to help whenever he had a problem, which I was pleased to do, for as it was, I had been doing all the new more intricate work enjoying the challenge. During this stage in my career, it was beneficial to be working for W. R. Royles… their policy was to promote the latest technology. By working there I was kept abreast of the latest innovations.

The Vario Klishograph at Royles was the second to be bought into the country. It was our good fortune, that we had an employer electronically minded, technically skilled, artistically sympathetic and open to the challenges of a modern reproduction department. In turn, each member of the staff was taught until another scanner purchased - and linked in - to the production line.

Royles must have been far in advance of most other printers… this technical know-how was used as a marketing ploy – used to bring in work from outside. The gambit was that here was a system that did without man made variables… the object had always been to find a machine which would eliminated workers altogether. Firms would ultimately stand the cost if they could do without union discord.

It was not long before a number of firms were producing rotary scanners - producing quality colour separations - to the same high standard the reciprocating Vario set… The rotary scanners could produce either negative or positive colour corrected sets. The original, either flat copy or transparency, wrapped round the copy drum. A modulated laser light beam, using filters or prism, reflected or transmitted a beam of light - to expose a film – later halftone screened. A separate pass of the light produces one of the printing tri-colours – yellow, magenta or cyan.