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from Theory into Fiction into Melodrama**

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Abstract

The question of the impact of the development of machinery on the economy and in particular on the relationship between capital and labour was a major issue in England in the first half of the nineteenth century. The introduction of machinery raised profound questions for politicians and political economists, and provoked strong reactions by workers from as early as the 1790s and this was particularly prevalent in the 1820s and 1830s as the use of machinery spread.

Harriet Martineau was perhaps the most successful popularizer of Classical political economy. Writing in the late 1820s and early 1830s she outsold Dickens for a while. In her work she concerned herself with the question of machinery and in particular the hostility to it by workers. This is apparent in the early work 'The Rioters' written in 1827, and in the tales 'The Hill and the Valley' and 'The Manchester Strike' from her *Illustrations of Political Economy* 1832-4. In 1834 two plays were put on in London, not only influenced by these two tales but also by another from the *Illustrations*, 'Life in the Wild'.

This paper examines Martineau's contributions to the debate concerning machinery and looks at the theoretical underpinnings, the natures and implications of her fictional accounts and how these in turn influenced the two London dramas.

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Harriet Martineau and Industrial Strife: from Theory into Fiction into Melodrama*

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Industrial conflict was a feature of early industrial Britain. The development of markets, the division of labour and the introduction of machinery brought change, and with it conflicts between capital and labour. In this paper we are interested in two forms of industrial strife – machine breaking and strikes in the 1820s and 1830s.

The question of the impact of the development of machinery on the economy and in particular on the relationship between capital and labour was a major issue in England in the first half of the nineteenth century. As Maxine Berg (1980) has shown, the introduction of machinery raised profound questions for politicians and political economists, and provoked strong reactions by workers from as early as the 1790s and this was particularly prevalent in the 1820s and 1830s as the use of machinery spread.

Alongside this and sometimes associated with it were the issues of wages and employment and industrial action which could be taken to protect either or both. Strikes were an important feature of the early industrial landscape and the popularizers of political economy paid much attention to them.

Harriet Martineau was perhaps the most successful popularizer of Classical political economy. In her work she concerned herself with the question of the opposition to machinery and to the more general question of strikes. Both themes are apparent in the early stories ‘The Rioters’ (1827) and ‘The Turn-out’ (1829),¹ written before she read political economy, and in the tales ‘The Hill and the Valley’ and ‘The Manchester Strike’ from her *Illustrations of*

* I am grateful to Salvador Almenar and Roger Backhouse for comments on an earlier version of this paper

¹ ‘The Rioters’ is a story of machine breaking in Manchester and the ‘The Turn-out’ a tale of a strike in a cloth manufacturing town.

Political Economy 1832-4. With the *Illustrations* she made her name and future and she outsold Dickens for a while.²

It has been argued by Booth (1969) that by the 1820s a new kind of melodrama had emerged in British theatre. Unlike earlier melodramas which often had foreign settings, the new genre had wider, native subject matter – British villages and farms, mills and factories, shops and city streets. Favourite characters were the villainous squire or employer, and the honest and virtuous worker and crime was a common feature. Among the varieties of these domestic melodramas were a few ‘Factory’ plays. In the 1830s two of these plays were performed in London. One, the ‘Factory Lad’ by John Walker, was produced at the Surrey theatre in October 1832; the other, ‘The Factory Strike’, by G. F. Taylor was put on at the Royal Victoria in 1838. It has been argued that these melodramas were influenced by the two tales from Martineau’s *Illustrations* already referred to as well as the first tale ‘Life in the Wilds’.

This paper examines Martineau’s contributions to the debate concerning machinery and strikes and looks at the theoretical underpinnings, the natures and implications of her fictional accounts from the *Illustrations*, and how these in turn influenced the two London melodramas.

Harriet Martineau: Background and Influences

As a young woman Harriet Martineau’s future was by no means certain to have been so successful. Her father’s textile business suffered financial losses in 1825 and he died the following year, leaving six children for whom no proper provision had been made. The business completely collapsed in 1829 and Harriet was faced, like many young women in her position, with either getting married or becoming a governess like two of her sisters. The deafness with which she suffered from the age of sixteen made a career as a governess or a music teacher unlikely and the man to whom she was briefly engaged unfortunately died. Before she was twenty Harriet had been writing articles and sending them to religious periodicals and in particular the Unitarian *Monthly Repository*. Now bankruptcy both impelled and freed her to move from amateur writer to professional, as she wrote in her *Autobiography*:

² Sales have been estimated at 10,000 for the first volume of *Illustrations*. This compares well with the novels of Dickens, for example, which typically sold only 2,000 or 3,000 copies. See Fletcher (1974, p.370)

I began to feel the blessing of a wholly new freedom. I, who had been obliged to write before breakfast, or in some private way, had henceforth liberty to do my own work in my own way, for we had lost our gentility...(1877, I, p141)

As Elaine Freedland has put it, ‘the iron laws of political economy rescued her from the iron laws of middle-class domestic economy’ (1995, p38). She was brought up in a Unitarian household and a key element in her thinking was a strong belief in the right to work. This belief came to underpin what some would say was her conservative attitude to strikes as well as her very progressive views on slavery.

Inspired by the reading she did in order to review Thomas Cooper’s *Lectures on the Elements of Political Economy* published in London in 1831, she determined to remedy her lack of knowledge of political economy by further study. An important moment in her career came when she read Jane Marcet’s *Conversations On Political Economy*:

I took up the book chiefly to see what Political Economy precisely was; and great was my surprise to find that I had been teaching it unawares, in my stories about Machinery and Wages. It struck me at once that the principles of the whole science might be advantageously conveyed in the same way (1877, III, p138).

She thus embarked on the *Illustrations of Political Economy*, a series of twenty four fictional tales written to elucidate the principles of Classical political economy to a wider audience. There was a twenty fifth concluding essay in the series entitled ‘The Moral of Many Fables’ which was not a tale as such but a ‘summary of the Principles of the Work’. The theoretical structure of the set of tales as a whole was taken from James Mill’s *Elements* but there were other influences including Smith, Malthus and McCulloch. There was underneath all of her economic ideas an overriding set of convictions from her Unitarian background. Principal amongst these as Hoecker-Drysdale has put it, was the belief in necessarianism ‘which recognised both the influence of natural laws on human existence but, at the same time, the moral responsibility and agency of each individual’ (2001, pp185-186). As Martineau wrote in her Autobiography ‘the workings of the universe are governed by laws which cannot be broken by human will...no action fails to produce effects, and no efforts can be lost. I have no doubt...that true Necessarians must be the most diligent and confident of all workers’ (1877, I: pp85-86).³

³ Quoted in Hoecker-Drysdale (2001, p103).

The Theoretical Background⁴

The Machinery Question

With regard to machinery the focal point for the discussion of the 1820s and 1830s was of course the work of Ricardo. As Berg (1980) has argued, Ricardo's overall view of machinery was favourable. His case in Chapter XXXI prompted by the work of Barton (1817) was that machinery may be harmful but 'tempered only the positive force of his policy proposals on technical change' (Berg, 1980, p.73). His overall positive view was that machinery was useful - it could cheapen production and offset the effects of population growth, rising wages and falling profits

In the *Essay on Profits* (1815) Ricardo criticized Malthus for suggesting that low corn prices resulting from free trade in corn will harm the working classes and argued that, on the contrary, the effects would be nearly the same as the effects of improved machinery which 'has a decided tendency to raise the real wages of labour' (1815, p.35). Ricardo took a similar line in correspondence with Malthus in 1815: 'In the case of great improvements in machinery, - capital is liberated for other employments and at the same time the labour necessary for those employments is also liberated, - so that no demand for additional labour will take place unless the increased production in consequence of the improvement should lead to further accumulation of capital, and then the effect on wages is to be ascribed to the accumulation of capital and not to the better employment of the same capital' (*Works*, 1951, VI, p.228). Ricardo made comments in Parliament on Robert Owens's view of machinery, where again Ricardo refused to allow that the demand for labour might be reduced.⁵

Ricardo appeared to change his mind in Chapter XXXI, added in 1821,⁶ and this has been attributed to the influence of John Barton who published a pamphlet in 1817 entitled *Observations on the Circumstances Which Influence the Condition of the Labouring Classes of Society*. Ricardo develops an example in which a capitalist has capital in a joint business of farming and manufacturing and the funds available to pay workers are predetermined in both money and real terms. A restructuring of capital now occurs in the next period as the labour of some of the men is used to produce a machine and not food and necessaries. As a result of this, less food and fewer necessaries are produced in the following period, and this reduces the level of employment

⁴ The arguments in this section draw upon my *Capital and Wages* (1994).

⁵ See Hollander (1979, p.348n).

⁶ Page references to the 1821 Chapter XXXI are to Volume I of the *Works and Correspondence of David Ricardo*, CUP, 1951.

Ricardo's chapter aroused immediate reaction. Among the first to respond was McCulloch who, was furious to discover that Ricardo had now shifted his position,⁷ having just changed his mind in favour of machinery as a result of Ricardo's earlier favourable arguments. Others were concerned to show the special nature of Ricardo's case and to deny its importance. In an article in the *Westminster Review* of 1826, William Ellis argued that the strongest case against machinery is where it is constructed using capital formerly devoted to wages (the Ricardo case) and here wages could only be temporarily reduced.⁸ However, he goes on to dispute even this possibility on the grounds that 'the additional capital devoted to the construction of a new machine is not drawn from the fund to which the labourers have to look for support' but from fresh savings (1826, p.116). In his 1834 volume *On Wages and Combination*, Torrens made essentially the same point and denied that workers employed in producing wage goods are ever 'withdrawn from these occupations for the purposes of constructing machines' (1834, p.41).

The question of machinery ranged far wider than discussions among the leading political economists of the day. The introduction of machinery was of profound significance to ordinary working people who resisted its introduction in many ways including machine-breaking and riots. Major disturbances occurred in Lancashire in 1826 as a result of a financial crash and the violence in the manufacturing districts was directed towards machinery. This outbreak prompted numerous calls for the spread of knowledge about political economy and machinery among the working class.⁹

There were further riots against the introduction of agricultural machinery in the rural areas of southern England in 1830 and these underlined the need to educate workers in the 'truths' of political economy concerning machinery and wages. The Society for the Diffusion of

⁷ McCulloch's change of view is outlined in a letter to Ricardo written on 13 March 1821. Less than three months later he wrote again complaining of Ricardo's volte-face. See Hollander (1979, pp.359 and 369).

⁸ Ellis argued that *reductio ad absurdum* is usually sufficient to dispense with the case against machinery: 'If the use of machinery is calculated to diminish the fund out of which the labourers are supported, then by giving up the use of the plough and the harrow and returning to the pastoral state, or by scratching the earth with our nails, the produce of the soil would be adequate to the maintenance of a much greater number of labourers' (1826, p.102). However, he argues, there are still some who take a middle course and assert that machinery while generally beneficial can be harmful in some cases. Ricardo, an 'enlightened philosopher', is distinguished from the 'vulgar objectors' to machinery but Ellis makes it clear that he finds Ricardo's argument 'inconclusive', (*Westminster Review*, Vol. V, No. IX, January 1826, p.102). Thomas Chalmers took a similar view and also made use of the wages fund doctrine, arguing that the adverse effects on employment will only be temporary: 'however the demand may vary or be lessened for particular kinds of work, the fund, out of which the wages come, is left unimpaired' (1832, p.475).

⁹ See Berg (1980, pp.102-106). McCulloch attributed opposition to technical progress to an ignorance of political economy in *A Discourse on the Rise, Progress, Peculiar Objects and Importance of Political Economy* (1824, p.84).

Useful Knowledge published *An Address to the Labourers, on the Subject of Destroying Machinery* (1830) which sold in large numbers. This was followed by *Results of Machinery* (1831) written for the S.D.U.K. by Charles Knight.¹⁰ Indeed the riots stimulated Martineau to attack machine-breaking in *The Hill and the Valley*.

The riots also provided the initial impetus for Senior's discussion in his *Three Lectures on the Rate of Wages* (1830). Senior spells out a similar example to Ricardo's with different numbers where at the end of the production period the wages fund is diminished and wages have fallen. While not denying this result Senior attempts to make the reader clear as to its precise implications:

The vulgar-error on this subject supposes the evil to arise, not from its true cause, the expense of constructing the machine, but from the productive powers of that machine (1830, p.38).

Senior then argues that while it was necessary to 'state this possible evil as a part of the theory of machinery' he did not attach any 'practical importance' to it (1830, p.39). This was because most machinery was constructed from profits or rents and led eventually to an *increase* in output, and he cites the printing and cotton industries as examples here (1830, p.40). He then argues that there has never been an instance of the 'evil' outcome occurring.

The prevailing view concerning machinery taken by political economist at the end of the 1820s was that while there may be some short disruption caused by restructuring capital if this was at the expense of the wages fund, this was seldom the case and in the longer run the effects of machinery were beneficial.

The Wages Fund Doctrine

At the heart of debate about Ricardo's chapter lay the wages fund doctrine and this is central to our discussion of strikes. As Taussig pointed out in *Wages and Capital* (1896, pp239-240), the major Classical writers did *not* use the wages fund doctrine to attack trades unions or strike activity but tended to focus their attention on the population question when applying wage theory to policy matters. But use was made of the doctrine in this way by the popularizers of political economy and we will examine this issue when looking at *The Manchester Strike*. The wage fund doctrine had a long history but for convenience the theoretical arguments employed by the popularizers can be summed up as consisting of a *short*

¹⁰ See Webb (1955, pp.112-122).

run model where both the wages fund and the labour supply are fixed, a *two period model* where the labour supply is fixed but the wages fund can vary and a *long run model* where both the wages fund and the labour supply can vary.¹¹

Harriet Martineau's *Illustrations of Political Economy*

The Hill and the Valley

'The Hill and the Valley' (1832), the second of Martineau's *Illustrations*, is a tale of industrial conflict and machine breaking. The tale is set in an iron works in a South Wales valley run by a man called Wallace with his partners – Mr Leslie who took no part in the business, Mr Cole who visited now and then and Mr Bernard who planned to join Mr Wallace at the iron-works at some time.

The tale opens by introducing a character called John Armstrong who lives a simple self-sufficient life in a hillside cottage with a housekeeper. Armstrong had been in business but had suffered losses through the dishonesty of his partner. He now hated business and kept his wealth of 200 gold guineas in a chest under his bed. He is introduced to Wallace who announces his intention of setting up an iron-works in the valley and will take a house nearby. Although Armstrong does not approve of the plan he becomes friendly with Wallace. The iron-works is established with 300 workers and Armstrong becomes one of several characters who Martineau uses to discuss issues with Wallace as a mechanism for bringing out the underlying principles of political economy.

A character who performs the same discursive role is Paul who it eventually transpires had been wealthy but lost everything by gambling. He gets a job in the iron works and works his way up to the important position of furnace keeper, lives very frugally, saves and eventually engages in buying and selling of cattle while still employed at the works. He is respected by the employer, gains his confidence and restrains the workers in moments of crisis.

Another important character is Wallace's new wife and she is also soon engaging in discussions with Armstrong and her husband concerning the impact of industrialisation. Armstrong argued that the industrial scene created by the iron-works was inelegant and asked Mrs Wallace 'whether such a laying waste of works of nature was not melancholy' (p37). Mrs Wallace could not agree and referred to the beauty of the machinery and how gratifying to the taste it was 'to see how men bring the powers of nature under their own control by their

¹¹ See Vint (1994, pp41-42)

own contrivances' (p37). Moreover she argues that she knows nothing more beautiful than to see a number of people fully employed and earning comforts for themselves and for each other' (p39). Mr Wallace then adds that there is 'not less beauty in the mechanism of society than in the inventions of art' (p38). Armstrong accuses Wallace of liking to see ranks of slaves under him. Wallace replies there is no slavery in his business because unlike with slavery there is a bond of mutual trust between the capitalist and the free labourer:

It is the interest of our men and ourselves that the productiveness of our trade should be increased to the utmost; that we should turn out as much work as possible, and that therefore we should improve our machinery, divide our labour to best advantage, and bring all our processes to the greatest possible perfection (p39).

Here we see Martineau putting over the message from political economy that inherent in capitalist production is a harmony of interests between workers and capitalists. Wallace continues this theme of the harmony of interests, arguing that both capital and labour are necessary to production. Mrs Wallace argues that labour must be more valuable since labour must have been in operation first. Wallace accepts that capital owes its origins to labour but maintains that labour is in turn assisted and improved by capital and its productivity immeasurably increased. Mrs Wallace points out that 'the more perfect the machinery, the better for the labourer. And yet all do not think so' (p41). Mr Wallace replies:

Because those who object to machinery do not perceive its true nature and office. Machinery, as it does the work of many men, or that which it would take one man a long time to do, may be viewed as *hoarded labour*. This, being set to work in addition to natural labour, yields a greatly-increased produce; and the gains of the capitalist being thus increased, he employs a yet larger portion of labour with a view to yet further gains: and so a perpetual progress is made (p41).

Martineau is putting very clearly the positive view of machinery taken by the leading economists of the day.

The works prospered and the workforce grew from 300 to 1100. At this point Martineau gives the reader a foretaste of what may follow. This is presented in a conversation between Mrs Sydney (a governess to his partner's children) and Wallace. Mrs Sydney refers to the quantity of labour that has been brought into use in the iron-works and explains;

It was not merely the labour of eleven hundred pairs of hands that I was speaking of, but of the hoarded labour which does what no unassisted hands could do; the shearers and the rollers, and all the complicated machinery which enables us to treat iron as if it were wood or clay. I suppose, Mr

Wallace that you are free from complaints about the use of machinery; as your works are of a kind that cannot be done by hand? (Pp61-62).

Mr Wallace airs his anxieties as follows and in doing so provides an accurate account of what kinds of labour can in the short run be replaced by machinery:

At present we hear no complaints, because trade is good and wages are high, and the greatest object is to prepare as much metal as machines and men can get ready. But if times should change and, I am afraid we should suffer as cotton and silk manufacturers do. We should be told of this process, and that, and another, which might be effected with less machinery and more labour. Rolling and clipping must be done by wood and iron because no bone and muscle are equal to such work; but there is much labour in preparing limestone, stacking and loading the mine, and other processes in which we shall be assisted by machinery hereafter; and then I expect an outcry against such an employment of capital, though it must produce good to all in the end (p62).

Eventually there appeared the change of fortune of which Wallace was ever mindful. The price of bar-iron fell by a half due to unstable political and economic conditions. There was glut which may prove to be more than temporary due to increasing competition from abroad. Wallace and his partners were faced with a difficult challenge and they initially responded by reducing their own consumption but when this failed to improve matters they were faced with harder choices. Wallace argued that at all costs fixed capital must be maintained. If there *were* to be any changes they would be to *add* to fixed capital – not in the form of more furnaces but by substituting machinery for the labour which demanded wages. The partners agree that they would do this but not until they had tried to save the situation by reducing the rates of wages.

The first wage reduction was accepted quietly, the second with murmurings, but the third was met with threats of rebellion. In the end machinery had to be introduced and some men and boys were dismissed:

This created an outcry; but how could it be helped? There was no other way of preserving the capital of the concern, and on that capital everyman belonging to it depended as much as the partners. The work-people to be dismissed were, of course, chosen from among the least industrious and able (p91).

It could be argued that Martineau is putting forward Ricardo's case from chapter XXXI – she is certainly indicating that the effects on the workers are harmful but ultimately she is much more sanguine about these effects than he was. In the story Martineau, as narrator, says that it

was hoped that the sacked workers would find jobs elsewhere but they stayed until they had spent everything, tried to encourage those still in work to resign unless wages were increased, and were swearing at the machinery and the employers. Even those who moved away returned and indulged themselves in the spreading of discontent.

At this point Martineau forces up the pace and heat of the conflict. A boy is accidentally killed by part of the new machinery of which he was in charge. The new machinery was blamed for the death by some of the workers and the boy's mother. The workers shout for revenge and Paul tries to calm them down. However, discontent now becomes rife:

The delusion that the improvement in machinery which was the cause of the change in the times and not the consequence or the future remedy for such a change, had become too general and too firmly established in this society to be removed by a few explanations or strong impressions here and there (p103).

Two days after the incident Armstrong appears at Wallace's home to warn him of what he has heard at an outdoor meeting. At this gathering it had been agreed that a deputation should see the partners to demand that the quantity of labour which was replaced by the use of machinery should be restored to human hands. Also it was agreed that that every worker except the few required to attend the furnaces should be allowed to attend the funeral of the dead boy. If these requests were refused they would attend the funeral anyway and hold another meeting afterwards.

Wallace and Armstrong agreed that they would inform the magistrates to send in soldiers if the situation did not improve. In due course the workers came to Wallace's house where his partner and family were also staying and demanded that the machines be dismantled and that they should all be allowed to attend the funeral. These demands were refused.

Arrangements were made by the workers to meet and proceed to the funeral and Mr Bernard a partner contacted the clergyman to persuade him to talk to the congregation and encourage them in peaceful action. At this the young, timid clergyman disappeared, the workers could not find him and concluded that this was a plot by the employers to make fools of them. The result was that the crowd, brandishing clubs and shouting, set off led by the deceased boy's mother. Near the works they stopped, formed silently into a compact body, and attacked the first building destroying the machinery and gutting the place. Other buildings followed and then the boy's mother set fire to the offices where the books were kept and wages paid. More

moderate workers stopped her, fearing the destruction of the entire works. A group comprising some of the workers, Paul, and some gentlemen tried to defend the works but to no avail. In the end the soldiers arrived, surrounded the building and made Paul their first prisoner. Although some of the guilty pointed out his innocence he nevertheless did not flinch from his duty in pointing the finger at them. The tale ends with prisoners being taken away. The works is in ruin and will be closed down, and as the prisoners leave Wallace addresses the assembled crowd as to the righteousness of his actions and the wrongfulness of theirs:

If, in after years, any of your descendants, enriched by the labours of generations, should come hither and provide the means of enriching others, may they meet with more success than we have done! May they have to do with men informed respecting the rights and interests of society, as happy in their prosperity as once you were, and more patient and reasonable in adversity!

If these should ever inquire respecting the transactions of this day, it will strike them that the revenge which you have snatched – for I am told you call it revenge – is as foolish as it is wicked. Of all the parties concerned in this outrage, your masters suffer the least – though their sufferings are not small – and yourselves the most (pp131-132).

He went on to remind them that their jobs were gone, and that disgrace and the penalties of the law awaited many of them. Many of you must regret the events, he told them, but the best course of action now was to teach the children to obey the laws and make it clear to them:

that, however sad undeserved poverty may be, it is easily endurable in comparison with the thought which will haunt some of you until your dying day – ‘my own hands have brought this misery upon myself, and upon those who look up to me for bread’ (pp 132-133).

The contemporary view taken by most political economists concerning machinery is clear in this tale. The general view presented strongly by Martineau is that machinery is beneficial via its effects in the longer run although there may be some increase in unemployment in the very short run. However unlike Ricardo who continued to be concerned about the social conflict which would arise and which was unavoidable, Martineau puts the responsibility on the workers. First, the people sacked were the laziest and the less able so they had some part in their own misfortune. Secondly, they should try to find jobs elsewhere but instead of doing this they loitered to spread discontent. Their actions in firing the factory were of course wholly unacceptable and unnecessary and ultimately to the detriment to the workers more than the owners. The necessarian message is that the laws of political economy cannot be countered by human agency but individuals could and should by their actions endeavour to obey the law and avoid trouble for themselves and their families. Martineau’s objective is to

persuade readers of the immutable nature of the laws of political economy and the harmony of interests inherent in them in order to change their behaviour.

The Manchester Strike

Harriet Martineau's tale 'The Manchester Strike', which was No. 7 in her *Illustrations* series, presents another very good example of the way in which Classical wage theory could be used in trying to persuade workers to bend to the iron will of the laws of political economy. The discussion very skilfully employed the wages fund doctrine and long run wage theory, and was woven around the three forms of analysis - the short run, the two-period and the long run, outlined earlier. Unlike the Classical writers, Martineau made considerable use of the wages fund analysis to argue that strikes are futile.

The context of the story is a wage reduction by some capitalists in Manchester and the book begins with a not unsympathetic description of the impact of this on a worker, William Allen and his family. Allen is portrayed as an intelligent moderate man whose views are sought after by other workers and who tries to hold them back from striking. In the end, however, against his better judgement, he becomes their leader in the conflict. He is contrasted with Clack who has a persuasive tongue and urges the men to strike. There are a number of employers in the tale and one of the themes is the different rates which they pay for the same work. One of the employers, Wentworth, is presented as a sympathetic, wise and kindly man. In giving advice to a deputation of union representatives, he makes use of the wages fund doctrine by relating to the men in condescending tones, a parable about Adam talking to his gardeners. This is a very simple and clear wages fund argument. Wage goods are advanced by the capitalist to the workers to allow them to subsist through the harvest period at the end of which the whole produce is rightly the property of the capitalist - his capital is returned to him when the crop is sold. Martineau then gets Wentworth to develop his argument by exploring what happens in following periods. The workers and Adam make their bargain, the work is carried out and the crop is sold. 'What happens next season?' enquires one worker:

Next season, twice the number of men came to ask for work in the same plot of ground. Adam told them that he had very little more wages to pay away than he had the year before, so that if they all wanted to work under him they must be content with little more than half what each had formerly earned (1832b, p.36).

To this the men agreed hoping that things would improve, but the next year four times the number of workers appear and, although capital had increased a little, each man had not so

much as one-third the original wages. This increase in the number of workers occurs in subsequent years, and ultimately leads to dissatisfaction and a withdrawal of labour. This, however, only makes things even worse according to Wentworth. Only half the harvest comes up as a result of the turn-out or strike, and wages fall even lower than they were before. In the short run, then, the inexorable logic of the wages fund doctrine meant that if the labour supply increased from one discrete time period to another by an amount proportionately greater than the growth in capital available to pay wages, the wage rate must fall. The short run doctrine, then, is absolutely uncompromising; whatever Adam has set aside for wages is simply divided by the labour force to get the wage rate. The main aim, of course, is to make it absolutely clear that at any one time the average wage rate is determined by the amount set aside for wages divided by the labour force - a numerator divided by a denominator. The differing time periods and differing denominators are being used simply to drive home this point.

At the outset, then, in 'The Manchester Strike' the discussion of wage theory was in terms of a simple harvest model of the wages fund where the analysis is in real terms. Later in the story the men raise with Wentworth the quantity of money wages, to which he replies that the level of money wages matters little:

If a penny a week would enable a man to buy all the necessaries for himself and his family, and if a pound would do no more, would it signify to any man whether his wages were a penny or a pound?' (1832b, p.56).

Clack, replies that every child knew that the prices of bread and other things vary. Wentworth presses home the point by arguing that what is important for the worker is the quantity of wage goods available at any one time. If the amount of money wages is varied, wage goods prices will adjust to leave the worker just as well off as before. This is the argument made by McCulloch in 1825 that given a predetermined quantity of wage goods, an increase in money wages during or between production periods, will only increase goods prices proportionally to leave the workers no better off¹². Thus regardless of what is happening to money wages the real wage fund remains constant. It is crucial for this argument that workers only consume wage goods and not luxuries.

Despite Wentworth's efforts the strike goes ahead and later in the story Wentworth has another opportunity to impress upon the workers the importance and relevance of wage

¹² See Vint (1994, pp82-86)

theory. Referring to the situation that will pertain at the end of the strike, he argues that by then the wages fund will be wasted:

We have been consuming idly, and so have you; and there must needs have been great waste. And what is it which has thus been wasted? The fund which is to maintain you; the fund out of which your wages are paid. Your strike has already lasted long enough to change our ground of dispute. You will find that the question with the masters now is, whether fewer of you than before shall be employed at the same wages, or fewer still at higher wages, or as many as before at lower wages than you have yet received. Keep on your strike a little longer, and the question will be, how many less shall be employed, at how much less. Keep it on long enough, and the question will be entirely settled; there will be no wages for any body. Do you understand me?' (1832b, pp.97-98).

So here then the wages fund doctrine is being explicitly employed by Martineau to argue against strikes and, as I have already argued, this was something that was in the main avoided by the major Classical economists. Again, while this is not explicit, the analysis relates to two time periods. Wentworth is examining the impact of a strike during this period of employment and output, upon employment and wages in the next period. The main effect of the strike is to reduce output and revenue in the current period thereby returning less capital to the employers and reducing the likely future size of the wages fund. The wages fund, of course, *could* be maintained at its previous level in the next period but only by reducing other forms of capital outlay and this would ruin the business. This is made clear by Wentworth in a passage which follows the last. Here a worker argues that while strikes are bad, it is sometimes necessary to take no wages for a while in order to gain higher wages later. To this Wentworth replies:

Why, that would be very true if you had the power or were in the habit of keeping workmen and wages in proportion to each other.

If the masters had more capital than was necessary to pay you all at the rate you have hitherto received, you might gain your point by a strike, not as you sometimes do now, just for a little time till the masters can shake themselves free of their engagement, but permanently. But this not the case. The masters' capital does not return enough to pay you all at the rate you desire. If they are to keep their capital entire, you must either take less wages, or fewer of you must take wages at all. If you will all have the wages you desire, the capital which pays them wastes away, and ruin approaches (1832b, pp.98-99).

This passage subtly, almost in passing, stresses the importance from the workers' point of view of being able to keep 'workmen and wages' or labour and capital in proportion to each other. If under these circumstances employers were not allocating as much to wages as they were able to do they could be made to do so by strike action. Here is an example of the argument which was quite common, that one beneficial role for trades unions is that they may enable the market rate of wages to be arrived at if for some reason the usual competitive mechanism is not working. It is quite possible that Martineau took this idea from McCulloch who had argued along similar lines.¹³ Wentworth then argues that this is not actually the case in this instance; there is no surplus or unallocated part of the wages fund. If employers were still somehow forced to pay a higher rate of wages to all the men now employed capital will 'waste away'. This must mean that as a result of having to pay a bigger wages bill, employers will make reduced outlays on fixed capital, tools and materials with the result that the capital employed as a whole will be less productive, leading to falling returns and declining profits.

It is possible to see here how a wage fund analysis was employed to analyse the implications of strike action for the levels of output and revenue, and the future volume of the wages fund. The futility of strikes thus derives from the argument that in the immediate term there is no more to be had by the workers, and that, moreover, strike action taken between now and the next production cycle, may damage the employers' ability to pay even the same rate as now. At the back of this discussion is the argument, at times more explicit than others, that although workers are powerless in the short run, the power to improve their lot *does* lie with them in the long run. Thus while Classical long run wage theory is not fully or clearly spelt out it is clearly implicit in Wentworth's argument that with 'foresight and care, labour may be proportioned to capital as accurately as my machinery to the power of my steam-engine' (1832b, pp.37-38). Wentworth goes on from there to argue that unfortunately when things are good for workers and wages are high they tend to respond by bringing up large families. The effects of this are not immediately felt, but when they are the workers often fail to associate the accompanying fall in wages with their actions a generation before. Wentworth goes on to draw the obvious moral lesson from this and in doing so comes close to spelling out the dynamics of the long run wage theory in arguing that the worker should 'do what in him lies to prevent population from increasing faster than the capital which is to support it' (1832b, p.104).

¹³ See Vint (1994, pp.96-97).

Martineau's work, then, represents a powerful integration of Classical theory and fictional narrative.¹⁴ The outcome of the story is ultimately a victory for the power of popular political economy: the employers meet and agree that the firms paying the lowest wages will raise them to the average and the higher payers will do likewise. The workers accept this equalisation and the strike ends, although not all the workers will get their jobs back. Allen has a meeting with Wentworth to see if he can work again but Wentworth although feeling sorry for him says that he can now only employ two-thirds of the number who went on strike. Priority will go first to those who left unwillingly and the remaining jobs will go to those who have worked for him for many years. Allen, the sensible counsellor, the wise restrainer of the men and the unwilling leader is thus punished and condemned to a life hauling a water-cart in summer and sweeping the streets in winter.

It is interesting to read what Martineau said about her fictional character Allen and strikes two years later in the section in 'The Moral of Many Fables' of 1834 which refers back to 'The Manchester Strike':

I trust and believe that there are many William Allens among the class of operative; but I also believe that few of these are leaders of strikes. Allen was an unwilling leader of a strike; and there are many who see even more clearly than he did the hopelessness and mischievousness of the contest, who have either more selfishness to keep them out of it, or more nerve to make a protest against a bad principle, and a stand against a bad practice. I believe that the most intelligent and the best men among the working-classes now decline joining a turn-out; and it is very certain that not only the most ignorant, but the worst, are among the first to engage. The reasons for this will be sufficiently obvious to those who consider what facilities these associations afford for such practices as ignorant and bad men like, - for meddling and governing, for rioting, for idling, and tipping, and journeying, and speechifying at other people's expense. (1834, pp55-56)

The Factory Plays

The Factory Lad

The plot of the melodrama 'Factory Lad' by John Walker, produced at the Surrey theatre in October 1832 is similar to that of *The Hill and the Valley*, namely the destruction of

¹⁴ See Empson (1833, pp.1-39) for a favourable contemporary review of the work of both Martineau and Marcet. Empson was convinced of the power of fictionalized political economy and praised Martineau's stories for their 'poetry and their painting' (1833, p.26). The significance of the message in 'The Manchester Strike', was clearly seen and Empson argues as follows: 'It is the object of the view from Manchester, to impress on the artisan no less valuable a truth; viz. that wages depend on the proportion between capital and labour; and that wages cannot be kept up, whilst the number of labourers seeking to be employed is out of proportion to the capital appropriated for their employment' (1833, p.26).

machinery and the firing of the factory – in this case a cotton mill. The first Act of the play is set outside the mill and a group of five workers appear leaving the factory as the clock strikes eight on Saturday evening. They are awaiting their pay – the first from their new employer who is the son of their former master. They engage in some light conversation concerning their former employer who was seen as a poor man’s friend who would not desert the workers in times of need nor ‘prefer steam machinery and other inventions to honest labour’. They hope that their new employer will be as kindly: a vain hope as it transpires. We are immediately introduced to the leading character George Allen who is portrayed very sympathetically as a sensible, hardworking man with a family to support. The new master of the factory ‘Squire’ Westwood arrives saying that he has something to tell them and one of the five men, Hatfield, declares that the old master always spoke his mind. The dialogue in the play continues as follows:

WESTWOOD. And that’s what I’ve come to do. I’ve come to speak my mind. Times are now altered.

ALLEN. They are indeed, sir. A poor man now has less wages for more work.

WESTWOOD. The master having less money, resulting from there being less demand for the commodity manufactured.

ALLEN. Less demand!

WESTWOOD. Hear me! If not less demand, a greater quantity is thrown into the market at a cheaper rate. Therefore, to the business I’ve come about. As things go with the times, so men must. To compete with my neighbours – that is, if I wish to prosper as they do – in plain words, in future I have come to the resolution of having my looms propelled by steam

ALLEN, HATFIELD , WILSON (together) By steam!

The men argue that the old master cared for the workers and would not turn them out even if it meant he had less profit. Westwood argues that steam will do the work more cheaply and asks them– do you not buy where you please, at the cheapest place? Hatfield says that there is no point in arguing – iron doesn’t have feeling. Claiming to feel insulted Westwood tells them to get their wages and depart forever. The argument continues and Allen rushes out crying ‘My Wife! My children!’ and eventually the men leave with a threat:

HATFIELD. Hard-hearted, vain, pampered thing as thou art, remember, the day will come thou’lt be sorry for this night’s work! Come, comrades - come!

[HATFIELD, WILSON, SIMS, and SMITH *exeunt*. WESTWOOD

Into Factory, sneeringly.]

The next scene takes place in Allen's house where his wife and two daughters are making lace and are about to prepare the supper. Allen rushes in full of anger and tells them the bad news that he has been turned out – 'that steam – that curse on mankind, that for the gain of a few, one or two, to ruin hundreds, is going to be at the factory!'

The men then meet in a public house – 'The Harriers' (landlord - a Mr Tapwell!) to discuss their intentions. They are joined by Will Rushton, an outcast and a poacher who, Allen tells his wife, had been 'enticed or ensnared' to emigrate and whose children had been 'slaughtered by natives, who hate white men and live on human flesh'. As Vernon (1977, p124) points out this picks up on a theme from Martineau's first tale *Life in the Wilds* which is set in South Africa and in which a colony of English settlers is attacked and some of the emigrants killed. Rushton becomes the leader of the group and they drink to the 'destruction of machinery'.

In the next scene the sacked workers and Rushton meet armed with various weapons and proceed to the factory where they break the machinery and set fire to the works in a scene reminiscent of *The Hill and the Valley*. Eventually the group are caught and brought before the magistrate – Mr Justice Bias and his clerk Cringe (one begins to get a sense of whose side Walker is on!) In the courtroom Rushton accuses Justice Bias of corruption and Westwood gives his evidence. Bias orders the men to go before the assizes (the higher court) to be judged. Rushton then shoots Westwood, the soldiers level their muskets at him and Allen, with his wife in his arms, and the other men all react with shock. The curtain falls to the sound of Rushton's hysterical laughter. As Vernon says it is clear that after their moment of triumph the men will all follow Westwood to their deaths.

The Factory Strike

The plot of the 'The Factory Strike', written by G. F. Taylor and put on at the Royal Victoria in 1838 also resembles that of the *Hill and the Valley* – a factory is burnt and like the *Factory Lad* the owner is murdered. The play opens with a group of workers sitting in the public house 'The Pig's Head' (landlord – a Mr Tim Guzzle!) discussing various matters. A man enters named Harris who is to play the role of troublemaker in the drama. He reports that someone they know has been sacked from a nearby factory which has introduced machinery, and when he took to begging the parish authorities put him in prison. Harris goes on that

‘machinery is getting everywhere; true, our employers hold off; still we may expect it, or worse’ (p8). The men ask him to propose a toast; well he replies ‘here’s may manual labour never be cut down by machinery!’, and the men all cheer. (p9). Soon the employer Mr Ashfield enters and the men all rise and bow. He is there with a purpose and the text of the play continues:

ASHFIELD. My friends, being informed that you were passing your evening here, I have come to address a few words to you, and to set your mind at rest on a subject which present agitates ye: you know full well the feelings of myself and partners respecting machinery; it is not our wish to see the industrious labourers unemployed, still I assure you that our best exertions cannot keep pace with the powerful rivals who effectually oppose us; our business rapidly falls off, and total ruin threatens us. I now therefore, for myself and fellow partners, promise you employment without the aid of machines; but it must be at a reduced scale of wages.

There were cheers but some murmurings and Ashfield says that although some may moan he will be willing to open the books for their inspection. He leaves and the men led by Harris begin to incite the men with suggestions that the books could be false and that rather than accept lower wages he would rather burn the factory down. A worker named Warner (so named because he serves to warn the men!) enters and Harris proposes a strike. Warner counsels against – the employers ‘propose as a last resource, a reduction of wages, and shall we basely frustrate their noble intentions? No, let us rather assist them, and not work their ruin and our own downfall’ (p11). Harris and several others go to Ashfield and ask to see the books. Ashfield replies that his partners will not agree so he must withdraw his promise. Harris argues that unless the books are seen there will be a strike and Ashfield goes to ask his partners one more time. While he is away Warner again beseeches his fellow workers not to strike. When Ashfield returns he apologises but his partners refuse the request. The men then say that they will strike and Ashfield says that in that event he will commence the use of machinery. In the end the factory is burnt and in the attempt to stop them Ashfield is murdered.

Act II of the play is set three years later. Warner is still unemployed and the other men have become highwaymen. Ashfield’s son returns to reclaim his property but after some further twists in the plot he is also murdered by the highwaymen and Warner is unfairly imprisoned for the crime. Eventually the killers are exposed and Warner is released.

Conclusions

The discussion of industrial conflict has taken us from theory to fiction and then to drama. Our findings can be grouped under two main headings. The first relates to the similarities and continuities between the three forms, and the second to the role of political economy in these attempts to popularise.

Similarities and continuities

We have seen that the two tales from Harriet Martineau were based on contemporary principles of political economy. The settings reflected contemporary life and the realities of capitalist competition and technological change. There was great emphasis placed upon the notion of harmony of interests between workers and capitalists which was prevalent among political economists of the time. More specifically in the ‘Hill and the Valley’ she reveals an awareness of the Ricardian argument that in the short run the introduction of machinery may be harmful but also the generally accepted notion that in the long run it will be of benefit via its impact on productivity. In the ‘Manchester Strike’ she makes even more use of political economy in her explicit employment of the wages fund doctrine.

When we examine the second stage of the argument – the continuities from Martineau to the two melodramas, our interest switches to plot and character. As Sally Vernon has argued, the plays contained many of the same elements of plot and character that could be found in the two Martineau’s *Tales* – ‘The Hill and the Valley’ and ‘The Manchester Strike’ as well as ‘Life in the Wilds’ (1977, pp124-125). With regard to similarities of plot, the burning of the factory is an obvious point, although there were many real-world contemporary examples to call upon. The similarities between the characters is, however, striking – take for example William Allen in the ‘Manchester Strike’ and George Allen in the ‘Factory Lad’. Both are respectable family men – one reluctantly becomes a strike leader and ends up sweeping the streets; the other is forced by hardship to join with the arsonists and will surely die. By contrast both Paul in the ‘Hill and the Valley’ and Warner in ‘The Factory Strike’ try to work against the arsonists; both are unfairly arrested and then released. The men who join in the actions suffer prison, likely death, unemployment or a life of crime.

Popularisation and pedagogy: ideology or analysis

Between the principles of political economy at one end of the scale and the dramas at the other a considerable transformation has occurred. There is a substantial loss of explicit

theoretical economic content matched by an increased importance of plot and character, and social and political sentiments. There is some continuity in the context – the changing nature of competitive capitalism, the impact of machinery, and the consequences of these forces on wages but this is not theorised in the dramas and would be familiar to an audience unacquainted with political economy. What was important for both political economists and the dramatists was the reception of their ideas. For the political economists their audience was the relatively highly sophisticated group of economists – members of the Political Economy Club – who while not agreeing on everything and indeed disagreeing vehemently on some issues nevertheless shared many ideas and a commitment to intellectual argument and debate. The dramatists were more conscious of their audiences and were careful to put on productions that would be in tune with their sympathies and sentiments. Thus the ‘The Factory Lad’ produced at the Surrey Theatre portrayed the employer Westwood as a nasty, unsympathetic character who is eventually shot dead in court. Vernon has argued that the audience for this play probably consisted, in part at least, of working class people who may have found the anti-authoritarian tone appealing.¹⁵ ‘The Factory Strike’, however, presented the employer Ashfield in a much more sympathetic light who tries to find his way through the conflicting forces at work on him and his business with the minimum of harm to the workforce. The audience at the Royal Victoria, where the play was produced, was mixed - comprising members of the local working classes and visitors from the West End and the City of London. It may have been this mixture which accounted for the theatre manager’s caution in presenting politics on stage and why, as Vernon argues, ‘The Factory Strike’ is less passionate than ‘The ‘Factory Lad’.¹⁶

For a political economist, then, the purpose of writing was to persuade other economists of the rigour and validity of one’s theoretical ideas without regard to sentiments, although there may be general sympathy for the plight of the working classes. For the dramatist, the purpose was to entertain and involve the emotions of the audience, and if there were to be any

¹⁵ Vernon argues as follows: ‘...the manager, David Osbaldiston, when testifying in that year before the House of Commons select Committee on Dramatic Literature, declared that the theatre attracted mainly local people of all classes. How much the working-class portion of the audience consisted of mechanics or labourers with fairly regular jobs, and how much of street people, such as costermongers, is unknown. In any case a factory play of an anti-authoritarian bent would be calculated to make a strong appeal to a part of the Surrey audience’ (1977, pp123—4). Osbaldiston’s testimony is found in *Parliamentary Papers*, “Report from the Select Committee on Dramatic Literature,” (1831-32), VII, 95.

¹⁶ Vernon points out that the manager George Bolwell Davidge testified before the Select Committee on Dramatic Literature in 1832 and ‘though he told the Select Committee that he opposed the a censorship of plays prior to performance, he assured them that managers were not likely to attempt controversial political subjects. “I am induced to think,” he said, “it would never be to the benefit of any theatre to meddle with political matters generally, because what you might derive from the representation of plays which pleasure to one party, you would lose by giving offence to the others” (“Report,” p85).’ (1977, p127).

inherent lessons these would be gained by engaging with the artistic aspects of the production not any theoretical, didactic material.

For Harriet Martineau things were a little more difficult than for either the political economist or the dramatist – in a sense she was constrained between the competing demands of the two genres. She wished to teach key aspects of economic theory *as well as* to reach out to the hearts and minds of people via fiction in order to persuade them of certain truths. This has resulted in some criticism of her work as literature. For example, Deirdre David has argued that in Martineau's work 'the characters speak like the embodiment of the stiff principles that they are' (1987, p42). There is little scope for the characters to develop spontaneously as they might in the works of a great novelist such as Dickens for example. For the political economist the stiffer the principles the better; for the theatre owner or playwright the audience reaction was paramount. Harriet accepted the former and cared little for the latter – her ambition was not to reinforce existing sentiments but to change them.

There is some recognition of this in the literature. For example Franklin has maintained that 'it can be argued that these stories should not be judged as fiction at all but as worked examples of the way economic laws affect people' ((2001, p xv). This seems to sum up Harriet's dilemma perfectly. Freedland has argued that economic laws were carefully represented by Martineau 'as counterparts of the natural, immutable, and inevitable laws of the physical sciences....Economic relations are not humanly made and nor are humans responsible for, or even capable of, improving these relations' (1995, p33). This was necessarianism at work. Martineau's tales provide a palliative for the middle class reader because the difficulties and pains of capitalism are due to wrong action whereas 'obedience to the laws of the market will eventually lead to prosperity for all classes' (p35). The problem with this is, of course, that if human relations are not humanly made what leeway is there for human action which is at the heart of fiction or drama?

Finally, we can agree with Henderson that Martineau's writings were an accurate reflection of the Classical literature (1995, p77). The *Illustrations* did not contain any path breaking ideas although the tale *Demerara* on slavery is generally thought to be ahead of its time. John Stuart Mill argued in a letter to Carlyle that Martineau pushed the argument in favour of laissez faire to absurdity¹⁷ but on the whole if there was criticism to be levelled for her portrayal of political economy it should be also partly levelled at the economists themselves.

¹⁷ J. S. Mill to Thomas Carlyle, 11 and 12 April 1833. Quoted in Henderson 1995,p90)

They put forward quite profound and wide-ranging propositions – such as the wages fund doctrine – but politely refrained from attempting to apply them in a popular context. Harriet, by contrast, took the bull by the horns and did not shirk what she thought was her duty – to educate the people in the true laws of political economy as seen through the necessarian eyes of a Unitarian.

Despite the constraints she faced Harriet was remarkably successful in the short run, although it did not last. What does remain is a question – despite the difficulties and criticism, has anyone popularised economics *via fiction* as successfully since?

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