



## **ECONOMIC DETERMINISM OR POLITICAL STRATEGY ? : A REJOINDER**

**David Neilson and Paul Harris**

Our contribution to the 'Mathews debate' (Harris and Neilson, 1996) was not intended to be a 'continuing attempt at intellectual assassination [of Mathews]' nor an 'all-out attack on [his] supposed determinism' (Mathews, 1996, p.89). We were surprised and disheartened by this reply to our paper and would like take this opportunity to restate our position more clearly in this rejoinder. The aim of our contribution to the debate continues to be to offer critical support to Mathews' project, in opposition to what we would call 'orthodox Marxist' critiques of Mathews, in particular, and 'post-Fordism', in general. The trenchant critics of Mathews have caricatured, and some have even mis-quoted, his position on technology. In contrast to the critiques, we consider that Mathews consistently argues that technological developments only open up historical possibilities. We agree with Mathews' position that a given technology does not automatically 'determine' a particular form of workplace organisation. Further, we agree with Mathews that workplace organisational outcomes are first and foremost the product of the struggle between different ideas, identities and interests. 'The Mathews' debate' itself is part of this struggle. Although Mathews writes in his reply that he has 'moved on' (p. 93) from this debate, we strongly believe that his innovative and influential work still remains centrally important to the on-going struggle over workplace organisation in both New Zealand and Australia. Our criticisms involved bringing in the regulation approach to extend the relatively undeveloped macro dimension of Mathews' work. Ironically, this macro dimension, which could be interpreted as 'determinist', has not been identified as such by Mathews' trenchant critics.

### Workplace Reform: A Political Strategy

Advocates of different workplace organisational outcomes are engaged in a struggle to win over the labour movement, and capital and the state, to a particular strategic option. Mathews' work can be appreciated as a strategic intervention in this struggle in order to convince participants of the likelihood and desirability of the establishment of a democratic and humanised technology-workplace mix (socio-technical paradigm) for the 'advanced industrial societies'. The strategic question implicit in much of Mathews' work is how can the union movement remain viable and progressive in an environment in which their power has been weakened by the breakdown of Fordism and the ascendancy of the free market?

Mathews could be interpreted as making a strategic argument for the more positive elements of the post-Fordist model, and against the negative 'neo-Fordist' elements, such as the peripheralisation of the labour market. He argues that the trade union movement needs to pursue "a co-operative strategy where the employer concedes issues previously held to be 'management prerogatives' under Fordism, in return for union accommodation on work reorganisation, multi-skilling, flexibility and commitment to productivity and efficiency" (Mathews, 1989, p.158). We suspect that opposition to Mathews is not fundamentally to do with the charge of 'technological determinism' which have become code words of intellectual abuse. The sub-text of Left criticism is to discredit Mathews' work in order to delegitimize his message of a new compromise between unions and management.

However, Mathews does attempt to give historical weight to his vision by arguing that the socio-technical paradigm, which combines advanced computer technologies with multi-skilling, responsible autonomy and democratic worker participation via unions will deliver the most competitive results. Economic survival, or more accurately, remaining one of the advanced capitalist economies in the face of international competition, eventually implies adoption of Mathews' preferred 'best practice' technology workplace organisation mix. Now, this is not *technological* determinism, but does this bring in another kind of 'determinism'?

Mathews argues that there is an optimal fit between technology and workplace organisation; and that 'international competitiveness' requires an optimal or best practice workplace-organisation mix if a national economic status is to be retained. Such a position does not imply that this outcome is necessary or 'determined' in any particular case. In the bigger picture, however, Mathews tends to argue that the framework of competition will force 'best practice' outcomes to dominate, because other alternatives will not succeed. Closer examination of the relation between workplace organisational form, technology and mode of regulation is required to examine this predictive thesis. More specifically, we investigate, within a regulation perspective, the following question: will convergence towards 'best practice' or continuing diversity characterise workplace organisation into the twenty first century?

### **Convergence or Divergence: A Regulation Perspective**

In concert with Mathews, the regulation approach emphasises the openness of history, and more specifically, the primacy of politics in determining technological outcomes in times of crisis and epochal transition: "The present industrial divide is first and foremost a political divide" (Lipietz, 1993, p.347). In periods of crisis and transition, workplace organisational forms are the outcomes of struggle over regulation: both at the micro and at the macro-level. Outcomes are the result not only of struggles between workers and managers within the workplace, but also between movements, such as between neo-liberal and social democratic movements, who are competing to implement their preferred institutional framework of regulation.

However, in the regulation approach, not all is possible. The relationship between technology and workplace organisation is not completely contingent since a limited number of forms are consistent with a given technology, and many forms are inconsistent. Furthermore, once established, modes of regulation place direct parameters on possible workplace organisation through industrial relations legislation, accepted production and wage norms, and indirect parameters via the rules of

competition and exchange. Nonetheless, on-going struggle over the form of regulation occurs even during periods of stability.

Regulationists have emphasised that there are strong 'convergence' tendencies towards a one 'best practice' 'technology paradigm' (the set of principles embodying a particular technology workplace organisation mix) within the logic of a particular accumulation regime and mode of regulation. A leading or dominant technology paradigm in one sector of production tends to become the model which other sectors follow (Lipietz, 1992). For example, Fordism was characterised by a leading model or 'technological paradigm' that spread to most sectors of production. In general, a model of national development which coheres as a stable regime of accumulation (a pattern of macro-economic growth) is based in a consistent or compatible fit between a 'mode of regulation' (rules of economic co-ordination) and a 'technology paradigm'.

The tendency towards a single dominant technology paradigm is premised on at least three factors:

1. the existence of a learning process of imitation and experimentation across industries and countries, based in a conception of an existing or possible superior technology paradigm (Lipietz, 1995);
2. the existence of similar modes of economic regulation across countries, especially in terms of the framework of 'wage/labour relations' (Boyer, 1988); and
3. the existence of competition which encourages agents to adopt the most productive and sustainable technology paradigm available.

The first two conditions for convergence are reasonably consistent with the situation of the advanced industrial economies during the Long Boom or Fordist period. The US Fordist technology paradigm was widely conceived as superior, and was imitated and developed across industries and countries. The advanced industrial economies were based in a fairly similar set of wage labour relations which generalised wage increases within a clearly demarcated job classification framework. The wage relation was generally based in the acceptance of Keynesianism as the principle of stimulating internal demand. However, for at least the fifties and sixties, competition was a relatively weak factor forcing

convergence to the extent that accumulation was reasonably 'auto-centric', regulation was 'monopolistic' and some particular industries were heavily protected from overseas competition.

To some extent this 'best practice' tendency under Fordism has been overestimated. Fordism is an ideal-typical model of development. The historical experience of particular capitalist countries during the Fordist period attests to a persisting variety of technology paradigms operating in different sectors of production, and indeed to hybrid combinations of Fordist and other technology paradigms. Further, the intensification of competition in the seventies did not lead simply to growing convergence of the Fordist technology paradigm.

In the contemporary globalising economic environment of open competition different co-existing technology paradigms and associated patterns of industrial regulation are apparent between the advanced and industrialising countries, and within each set. In the advanced capitalist countries, 'Kalmarism' and neo-Taylorism indicate diverging technology paradigm poles, between negotiated involvement of workers within an organised labour market, on the one hand, and external flexibility in the labour market combined with the reassertion of managerial powers, on the other (Lipietz, 1993, 1995). Between these two poles, different dynamic combinations are theoretically possible. Further, amongst the lesser developed capitalist economies will certainly be presented "an incredible mix of forms stretching from small-scale production to quasi-Japanese methods" (Lipietz, 1995, p. 346).

However, a descriptive summary of the contemporary situation as diversity and unevenness in technology paradigms and associated patterns of industrial relations does not refute the argument of convergence. That is, will the present diversity continue? Or, will there be a tendency within the present global regulatory framework which priorities 'international competitiveness' (Jessop, 1994; Petrella, 1996) towards a leading technological paradigm or best practice? According to Mathews, and to Lipietz, the model of 'negotiated involvement' (which is very similar to the 'socio-technical paradigm') is the superior model representing 'best practice'. Here, Mathews seems to suggest that, at least for the advanced capitalist countries, this model is the only viable one eventually. Lipietz is rather more ambivalent, suggesting a more

'fuzzy' outcome in which there is a 'co-existence of many types' (Lipietz, 1995, p.345). However, first, the claim that the 'socio-technical paradigm' is superior is debatable. The best practice literature relies heavily on a version of 'lean production', which seems in practice to be somewhat less liberating than the ideal model of Kalmarism or the socio-technical paradigm! (what Lipietz (1995) calls the inconsistent hybrid of 'Toyotism'). To some extent, however, technical superiority is not the point, because if we all go for Kalmarism /socio-technical paradigm then it becomes best practice by default! Hence, the need, from an ideological position, to encourage people and countries to pursue this option.

The key weakness of the convergence thesis is in the implicit assumption that competition tends to lead to a single best practice. Even if we erroneously assume the fictions of a level playing field and one big single market the convergence argument is problematic. As Karl Marx pointed out over a century ago, the coercive logic of competition implies a contradictory tendency: on the one hand towards the equalisation of the conditions of production, and on the other, towards innovation and hierarchy. Which tendency is stronger is, first, linked to the mode of regulation. The innovation/hierarchy tendency towards difference is lessened when regulation forces (or reinforces) a particular form of workplace organisation while making other options difficult or impossible to pursue. Fordist demarcation, for example, undermined the possibility of multi-skilling. Under a 'permissive' mode of regulation, which distances the state from direct involvement in the industrial relations arena, the tendency to difference is encouraged because capital may have more room to experiment and develop new technology paradigms.

Second, the competitive regulation of wage levels nationally and globally, implying groups of both low waged workers and generally greater wage stratification within and across countries, also encourages difference in technology paradigms. For example, the use of low wage labour with Fordist technology may produce a viable mix; while high wages encourages convergence towards capital intensive solutions. Differences across countries according to prevailing wage patterns and the degree of permissiveness of national modes of regulation

demonstrates the fictional character of the level playing field assumption, and the tendency to difference that unlevel playing fields imply.

Furthermore, there is no one big market. Various markets with varying levels of competition and various conditions of production co-exist (Boyer, 1996). Divergence or difference is again implied. Most obviously, different product markets operate in different conditions. A still growing market exists for simple, standard, Fordist consumer goods. Such goods may be most cheaply and efficiently produced using old Fordist and Taylorist technologies. Or closer to home, fast food formulas may still remain Fordist since this is the cheapest, most efficient and profitable strategy.

On a global scale, it would seem obvious that the tendency towards convergence is weak. The inequality in conditions underlying capitalist industrialisation is so strong and blatant between the advanced and the developing capitalist worlds. In particular, the existence of models of 'primitive' or 'bloody Taylorisation' (Lipietz, 1987) (based in direct and brutal coercion and extreme exploitation and old technologies) and 'peripheral Fordism' (ibid) (Fordist technology with low skilled operatives) is unlikely to be quickly transformed into the high tech., developed infrastructure and high skill levels of the advanced capitalist countries.

When considering competition on a global scale, it is clear that the tendency towards a single best practice can be strongly over-estimated if one simply assumes a seamless and competitive free market. Only when one assumes an environment of one big seamless free market for all consumer goods, technologies and money; and, moreover, where individual countries all offer roughly the same technical infrastructure, mode of regulation including the skills and price of the workforce to capital, that the tendency to convergence is strongest. And even in such an unlikely scenario, the tendency towards convergence is still not assured. In practice, the most likely scenario is the formation of a new hierarchical world economy (Lipietz, 1995).

This analysis still does not contradict Mathews' implicit position that: if advanced capitalist economies are not to slip down the hierarchy and become 'semi-peripheral', they need to adopt the latest technology and

the most compatible, ie., Kalmarian, framework of workplace organisation. However, this argument has several limitations if applied too rigidly. A hierarchy of technologies, a hierarchy of different forms of workplace organisation, and many different possible dynamic combinations between Lipietz's two poles seem to be the continuing possibility for advanced capitalist economies. Although such paradigm mixes may not be mutually consistent (Lipietz, 1995), this seems a moot point. Technology paradigms express the inconsistencies and contradictions of the different historical forms of capitalism. Fordism had contradictions which both were the basis of its success and its breakdown. In much the same way, the after Fordist regime embodies the contradictory solutions to the crisis of Fordism: on the one hand, an external flexibility of the labour market is a counter to the 'strong working class' profit squeeze thesis (Armstrong et al), while responsible autonomy is the counter to the 'paradoxical involvement' (Lipietz) or instrumental consciousness arising from the conception execution division of Taylorism. Furthermore, such a contradictory response may not only be the basis of a global hierarchy between the developed and developing capitalist worlds, but may continue to characterise the different sectors of the advanced capitalist economies.

Flexible, committed and responsible-autonomous workers may optimise productivity, especially in the context of advanced computer based technologies. But such a framework of workplace organisation does not lead directly to a Kalmarian solution, but more likely to a contradictory mix of coercion and consent. Commitment and flexibility may be linked to the neo-Taylorist paradigm as well as Kalmarism. An important question is whether the preferred social democratic alternative, à la Lipietz and Mathews, is sufficient to force the 'productive intensity' which is achieved within the contradictory mix, which Lipietz labels 'Toyotism', or which might be called 'lean production'. Of course, the contradiction cannot be taken too far. It would seem impossible to marry coercion as bloody Taylorisation with Kalmarism as consensus and commitment. However, Friedman's (1977) characterisation of responsible autonomy and direct control as the permanent conflicting tendencies in the capitalist organisation of labour remains convincing.

## Conclusion

Mathews does not posit an immediate or direct causality between 'technology' and 'workplace reform'. His work, in close accord with the regulation perspective, acutely appreciates the centrality of politics and strategy in determining workplace outcomes. However, the concept of 'best practice' within the context of competition producing a one best technology-organisational mix in the last instance could be interpreted as an 'economic (rather than technological) determinism'. However, it is probably more constructive to recast the debate in terms of convergence and divergence. From this perspective, Mathews underestimates the range of factors pushing towards the continuation of diverse types and contradictory mixes of technologies and forms of workplace organisation. Nonetheless, the argument that to remain part of the capitalist core requires the adoption of the most advanced technologies, and a form of workplace organisation which constructs workers as flexible and company committed, is compelling. But even here, such a combination does not imply straightforwardly the adoption of the socio-technical paradigm.

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