AN ANALYSIS OF RAILTRACK, UK THROUGH TIME AND SPACE

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Abstract

Current analyses of the failure of Railtrack commonly blame privatisation and the subsequent fragmentation of the railway network as the main reasons for failure. The prevailing explanations are characterised by a temporal boundary (pre-post privatisation) and a spatial separation (fragmentation of the system). However, the available empirical evidence does not support these assumed boundary characterisations. Our analysis shows that past analyses of Railtrack fail to adequacy consider the role of time and space. We question the conventional mode of thought and turn to viewing the phenomenon of Railtrack in processual terms and in time and space dimensions. We find that Railtrack was destined to fail due to a complex mix of interlinkage and interaction of ideology, socio-cultural issues and historical legacies.

Keywords: privatisation, railtrack industry, corporate governance

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Introduction

British Rail, the former state-owned railway company, was progressively privatised by the Conservative government between 1992 and 1996. As the private owner of the whole rail infrastructure in Britain, Railtrack was formally established in April 1994 and floated on the London Stock Exchange in May 1996. However, five years later, in October 2001, Railtrack plc was placed under administration by the Labour government. In October 2002, Railtrack was replaced by Network Rail, a new organisation defined as 'a not-for-profit private company without shareholders'. Network Rail is owned by a wide range of public stakeholders and run by a plc-style board appointed by the government (for more details, see Network Rail web site). The new ownership structure is designed to provide greater accountability.

The collapse of Railtrack was due to huge losses and massive debts which led to insolvency. In the financial year 2000/2001, Railtrack generated losses of £534 million (after exceptional items and before taxation), with a net debt/equity ratio of 127%. Railtrack's share price fell to 280p just before October 2001 when it entered administration, compared with its flotation price of 390p in 1996 and nearly £18 in 1998 (*Economist*, 13 October 2001).

Railtrack's poor quality of service together with three fatal accidents in 1997, 1999 and 2000 severely damaged the public's confidence and trust in the company as witnessed by a March 2001 poll which showed that among the 1001 adults sampled, 76% thought that Railtrack should return to the public sector (*Western Daily Press*, 21 March 2001). In December 2000, a House of Commons motion by 69 backbench MPs called for the renationalisation of Railtrack (*Rail*, 2001).

Many commentators suggest that the collapse of Railtrack is indicative of the total failure of the rail privatisation programme. However, current analyses of the demise of Railtrack leave many deep seated questions unanswered. The common and prevailing argument presented is that the Rail privatisation programme produced a fragmented network, a fragmentation that led to the systematic dysfunctioning of the whole industry, including mismanagement, poor service quality and safety, under-performance and ultimately the failure of Railtrack. It is our contention that current analyses are framed in a conventional mode of thought which has failed to adequately conceive of the dimensions of time and

space. The evolution of the Rail industry could be viewed relatively in terms of time and space and in so doing could bring a new understanding of the demise of Railtrack. First the time dimension, the time of privatisation is the assumed starting point of the failure. This is coupled with a company ethos of "profit first", allegedly generating short-term rather than long-term interests. Second the space dimension, the split of the united infrastructure network and operating system during the post-privatisation period is the assumed root cause of the rail problems. This split lead to multiple commercial contracts creating loosely linked relationships rather than a single hierarchical structure, which discourages cooperation and co-ordination amongst the participants.

Such conceptions of time and space sound convincing at first glance. However, if carefully examined, a *dual* logic problem is evident. Many believe that the failure of Railtrack implies that the fragmented system is 'bad' and that integration is 'good'; that the loosened structure is 'worse' and that a single hierarchical structure is 'better'; that the profit motive is a mistake and safety should be the only consideration. These notions are grounded in a paradoxical logic of 'privatisation bad and nationalisation good', in contrast to the Conservative government's ideology of 'private good, public bad'. However, questions need to be raised here: In the current political climate would it ever be possible to re-nationalise the rail infrastructure? Was the rail network under nationalisation good enough? Given the 'hard facts' of British Rail before privatisation, such as inefficiency, poor safety record, under-investment, political interference and managerial incompetence, it is doubtful that re-nationalisation would provide the panacea that the public crave. If both nationalisation and privatisation of the Rail network are incapable of providing satisfactory solutions to the Rail industry's problems, then what alternatives are available? A deep and considered analysis of the failure of Railtrack is an essential part of the process of finding the most appropriate ownership structure. This paper attempts to provide a fuller and more considered explanation of the failure of Railtrack than has hitherto been provided.

We would argue that the *dual* logic approach lacks careful scrutiny of time and space dimensions. In the broader context of contemporary social analysis time and space are rarely considered. In the Western tradition time and space are constructed as pre-given constraints, imposed from outside the organisation placed in order and ready for observation and explanation. These concepts of time and space are in modern social sciences as taken-for-granted norms, as seemingly less in need of reflexive thinking. Certainly, different perceptions of time and space would result in different ways of thinking and consequently, different understandings of Railtrack's problems. In this paper, we will consider how time and space are seen as presuppositions under conventional modes of thought and how it may be appropriate to consider both dimensions in understanding Railtrack based on a processual approach.

This paper is structured as follows. First, we critically review how the dimensions of time and space are perceived under the conventional thinking where a typical Newtonian understanding of time and space in the social sciences context is identified. We then go on to introduce an alternative way of viewing time and space within the social science context under a processual approach. Second, we consider the current mainstream explanations of the failure of Railtrack, essentially resting on 'blaming' privatisation and fragmentation of the Rail network. Third, we reveal the time and space dimensions embedded in the current prevailing explanations and scrutinise the credibility of the current analyses by reference to empirical evidence. Fourth, we examine the issue of Railtrack under processual thinking with the emphasis on indivisible time and inseparable space. Finally, we conclude by offering a new perspective on why Railtrack failed.

Time and Space

The traditional way of thinking about space and time in Western philosophy can be traced back to ancient Greek Atomism. The Atomists, Leucippus and Democritus, postulated that everything possesses unchangeable and homogeneous 'Being' and consists of infinite small primitive elements, called Atoms. The Atomists viewed an atom as unoriginated, indivisible, homogeneous and unchangeable, is self-propelling in empty space through contact with other atoms (see Windelband, 1900). Empty space, or the Void, was thought of as an unoccupied and infinite empty extension without any impact on the motion of matter. As Lucretius, another Atomist, emphasises, 'All nature then, as it exists, by itself, is founded on two things: there are bodies and there is void in which these bodies are placed and through which they move about' (quoted in Jammer, 1964: 29). Space is in this sense a receptacle for bodies, or a container for things, yet independent of and separated from things. Space is a timeless concept. It is something like a continuant, i.e. continuing to be occupied or partially occupied or unoccupied and enduring through time (Smart, 1964: 11).

The metaphor or image of space/time as a container has dominated Western philosophy. From Aristotle, Newton to Kant (see e.g., Smart, 1964; Casey, 1997), from ancient time to modern era, space and time have been conceived as fixed and stable containers for things to be located within, as a matrix of order to impose on natural processes (Rescher, 1996). Contemporary thinking is greatly influenced by Newton's concept of absolute space and time, which are regarded as senseless and independent of change. In contrast to the term 'relative', absolute space/time has five characteristics: (1) Simplicity: having no relation to anything external; (2) Immovability: always stable, enduring and unchangeable;

(3) Similarity: remaining always selfsame or equal, no matter what happens in its midst; (4) Originality: no need for any additional or supplementary reference system for its explanation; (5) Intelligibility: it is invisible, unpresentable by our existing measures and perceptible means (Newton, 1964: 81; Casey, 1997: 142).

The essence of Newtonian thinking is, as Toulmin (1990) remarks, the 'decontextualised ideal': a reality of the universal, the general, and the timeless. Such a mode of thinking assumes an objective ontology and enacts an instrumental praxeology (Tsoukas and Gummings, 1997: 656). Dominated by Newtonian thinking, contemporary social theorists take the traditional concept of space/time for granted. They simply see space and time as 'abstract containers', generally irrelevant to the analysis of central social phenomena except as objectively observed sites or settings, for example, space is seen as the domain of geography and time as sequences of events (Friedland and Boden, 1994: 4). Friedland and Boden (1994: 4) note that the search for universality and objectivity of social theories presupposes that the object under study is situated out of space and time, separated from the specifics of place and period. 'Social science literally presumed a view from nowhere'. In economics, for example, the marketplace was theorised as an abstract universe of traders, 'having no place at all'; economic man is assumed to be the same everywhere and across time. 'Space and time were all but banished in a friction-free, historyless world' (Friedland and Boden, 1994: 4). In sociology, society is theorised as a cybernetic system, an abstract structure driven by universal laws developed in the past (historical time). Time is often used in quantitative studies as a mathematical variable to make precise calculations in order to develop more abstract laws and generate general causality. Time has become a technical tool, a budget resource and a neutral environment. Spatial relationships have rarely received any attention in social theory (see Soja, 1994; Friedland and Palmer, 1994).

Giddens (1994) characterises modernity as 'organisation and manipulation'. He suggests that space and time at first became universalised 'empty' categories, generalised from and independent of any situation or event. Space and time then became disentangled as separate entities and distinct dimensions of existence. Finally, they were integrated and systematically restructured for the manipulation and reconstruction of the social world, for the co-ordination of social activities without reference to any particular place and period (Giddens, 1990, 1994). Friedland and Boden also make reference to the disentanglement of time and space and the reconstruction of the social world for the co-ordination of social activities without necessarily referring to any particular place and period (Giddens 1990, 1994):

People, events, organisations, and whole societies are no longer simply tied to single places or particular times. Instead, the essence of modernity is its ability, indeed necessity, to connect local times, spaces, and people with global agendas, standardised time horizons and constantly shifting spatial arrangements.

(Friedland and Boden, 1994: 3-4).

It is in this way that we are quite familiar with the modern creative concepts such as the global standard of Greenwich Mean Time (GMT) and the 'global village' of single space. While the former presents us homogenous, linear, equivalent, measurable, reversible and interchangeable instants/units of mechanical time and thus freezes dynamic subjects and social relations into static and dehumanised things (Russell, 2002), the later eventually constructs an abstract and empty 'simple location' without the diversity and richness of context, culture and geography—the value of space is given away to time and we are now homeless (Chowers, 2002).

The traditional mode of thinking on time/ space as being a fixed and empty container, as a mechanical abstraction and as an external environment has long been questioned in philosophy. For example, Leibniz's relational theory of time and space was in sharp contrast to the absolute theory of time and space. Instead of seeing space as a tangible entity, Leibniz argued that it was merely a system of relations in which indivisible 'monads' (units) stand to one another (see Smart, 1964). Leibniz is recognised as the first principal figurer of process philosophy in modern time. Process philosophy, in contrast to the dominant substance philosophy in Western tradition, has its own unique ideas on time and space.

Process philosophy can be traced back to the ideas of the ancient Greek philosopher Heraclitus (6th century B.C.). From the early 20th century it has been further developed by such well-known figurers as William James (1842-1910), Henri Bergson (1859-1941) and Alfred North Whitehead (1861-1947). The basic idea of processual metaphysics is that 'natural existence consists in and is best understood in terms of processes rather than things - of modes of change rather than fixed stabilities' (Rescher, 1996: 7). Process philosophy does not deny substances or things, but sees things as clusters of processes, as temporally stable patterns of processes, which are subordinate to processes and ultimately inhering in processes. In terms of time and space, process philosophers reject the traditional ideas and insist that: (1) Time/space should not be viewed as a container within which natural processes occur but rather as an aspect or feature of the process. Time and space are viewed as an integral and interrelated part of the process and therefore time/space is not independent of the process but a structural configuration of the process. (2) Time is not a linear, reversible and mechanical abstraction, but rather an outflow of a wave pattern of processes which is non-linear, irreversible, exhibited in breadth and duration and perceivable in intuition. Any process takes time, however short, and there are no instantaneous processes. Time implies a passage from one present point to another point, an emergent and transient present

emergent and transient present having its becoming and disappearance. (3) Space is not viewed as a fixed container for natural things or an independent stage in which natural processes are played out but is typified by the stability of a configuration of standing waves of processes. Space is process-constituted and its structure is determined through processes of interrelationship featured by patterns of causal connection. (4) Time and space in many instances are not separated from each other but rather interconnected and interlinked in the manifestation of natural processes. Processes are complex and have a certain temporal coherence and unity of distinct stages with a formal generic format or shape. Therefore a process embraces time and space. In this sense, rather than talking about time and space separately, process philosophers prefer to use the term space-time. (Rescher, 1996: 94-97; 2002: 1-14).

In recent years, time and space have attracted some attention in many inter/disciplinary areas. The overall trend in understanding time and space has been turned from fixed entities towards a much-loosened and reflexive orientation, which is sympathetic with the processual idea. In line with the work of Foucault and Derrida, for example, time/space is not identified as fixed entity, but as something ongoing and dynamic. Time and space have no steadfast essence, no deterministic foundation at all. Time/space is not singular and ideal, but a variable and changing ingredient with different masks (e.g., Casey, 1997). Many social theorists suggest that time and space in the modern context has been constructed on the basis of the materiality of social relations where human subjects are marginalised and subjected to time-space routines required by capitalism. In recent times the development of capitalism has witnessed emergent tensions between global forces and local action, between the velocity of money movement and the human responses and between the new power structure of totalitarianism and democracies has grown sharply. These contradictions are transforming the tactical dimensions of social life and consequently the central concepts of social theory require rethinking, particularly the notion of the territorially (space) and temporally (time) bounded and bonded society (Friedland and Boden, 1994). In organisation studies time has been used as a new research lens to consider not only organisational processes and practices but also to consider temporal-centred phenomena and considerations such as timing, pace, cycles, rhythms, path, flow, change, timing mentality, temporal norms and cultures, subjective and psychological experience of time, etc. (Ancona et al., 2001). Currently, the social construction of time is seen as an important theme in social sciences, in contrast to traditional Newtonian concept of absolute time (see Zaheer et al., 1999; Tabboni, 2001). Norbert Elias (1992), for example, suggests that time is a social construction, the symbol for a relationship set up between individual change (the continual transformations in body and thoughts) and some external change (a natural or social change: sunset, shop closing time, the sound of bells, etc.). The dominant theme is that time reflects society's social and organisational needs and its privileged values and therefore time is a result of social choice. However, the social time relationship is expressed in increasingly abstract, general terms, far removed from the real context and any concrete manifestation. Time is also viewed as a social norm, a social convention and thus habitualised in individual life and indicates a tool of self-discipline and self-constraint as well as a degree of individual free choice (Elias, 1992; also Tabboni, 2001).

Above we have examined the different modes of thinking on time and space. The following sections go on to consider Railtrack within the dimensions of time and space. Specifically we attempt to answer the question Will the processual thinking of time and space provide fresh insights in understanding the problems of the British rail industry and Railtrack? First we review the current thinking on the failure of Railtrack.

Current Analyses on the Failure of Railtrack

Major investigations and researches have been done recently in order to understand why Railtrack failed and to search better solutions for the future railway. The most important research products available to answer this question are two books *Broken Rails* (by Christian Wolmar) and *Off the Rails* (by Andrew Murray) published in 2001, both of which incorporate a number of views, opinions, inquires and investigations from politicians, managers, experts, investigators, workers and passengers. The government's white paper *Transport 2010—The 10 Year Plan* published in 2000 forms the official British government opinion. A further report *The GB Rail Industry: In Its Own Words* summarises a study based on a wide-ranging interviews held by Mercer Management Consulting between November 2001 and April 2002. Many articles which focus on the failure of British rail privatisation can be found in some journals and newspapers such as *Economist*, *Public Money & Management*, *Policy & Politics*, *Financial Times*, and *Newstatesman*. A common theme throughout these articles is the belief that the failure of Railtrack is primarily due to two reasons 1) the rail privatisation programme itself and 2) the method of privatisation which resulted in a fragmented structure of the rail industry leading to an inherently dysfunctional railway system.

The government's white paper *Transport 2010* clearly states that the privatisation of railway created 'a fragmented system' that generates short-term corporate behaviours without incentives for long-term planning and investment. The white paper lists a number of weaknesses of the system (DETR, 2000: 42):

- There was no framework for strategic planning of the industry as a whole.
- Most franchises were held by the train operators for only seven years, which inhibit long-term planning and investment.
- Performance standards were based on low historical norms, which failed to recognise the rising expectations of passengers.
- The industry structure did not anticipate the need for significant investment to cope with sharply increased passenger and freight traffic.
- There were no proper incentives for private companies to invest in expansion.

This official document emphasises that this fragmented system led to 'years of under-investment', which had produced an outdated and unreliable rail network.

The most representative analysis of the railway fragmented system is Wolmar's book *Broken Rails*. Wolmar points out that there were three crucial mistakes in the privatisation process.

1. Separating Railtrack from the rest of the network industry. In the name of competition, the Conservative government divided the network into about 100 individual businesses, including

- Railtrack, the owner of rail infrastructure
- Passenger Train Operating Companies (TOCs)
- Rolling Stock Companies (Roscos)
- Rail-freight companies
- Rail infrastructure maintenance services (BRIS)
- Heavy maintenance suppliers (BRML)
- Ancillary businesses, such as communications and research

Since all those companies interact with each other based on multiple commercial contracts rather than a single hierarchical structure, this resulted in a problematic focus on on-rail competition without cooperation and co-ordination between them and increased the possibility of major accidents and poor services (such as train delay and cancellation) occurring.

2. Turning Railtrack into a profit-making company. As an infrastructure provider, Railtrack is not profitable in nature and highly dependent on government subsidy. Allowing or forcing Railtrack to make profits is actually to encourage Railtrack to cut costs at the expense of safety and customer service quality.

3. Excluding track maintenance services from Railtrack. Since the interrelations were governed by contracts, Railtrack had no power to oversee and intervene in the maintenance performance. Moreover, as contracts between Railtrack and the maintenance companies were historically underpriced and fixed by the Regulator, the maintenance contractors had no incentive to ensure their best performance and instead, tended to cut service costs as much as possible.

Wolmar concludes that it is privatisation and fragmentation that created an inherently dysfunctional system under which:

- Safety was seriously compromised by over-emphasis on commercial aims. The separation of component parts of the rail network contributed mainly to three fatal accidents at Southall in 1997, Ladbroke Grove in 1999 and Hatfield in 2000, which resulted in a total of 42 people killed and hundreds injured.
- Compared with the industry operated by the formerly state-owned British Rail, the government spent more public money on a less efficient railway. Subsidies to the network were much higher between 1995 and 1998 than before privatisation. It was only in 1999 that subsidies were kept at the same level as those in 1994(Haubrich, 2001: 326). However, after the Hatfield accident in 2000, Railtrack requested huge amounts of taxpayers' money. When the government felt obliged to fund the network, it was however unable to exercise control over spending.
- Major capital projects, such as the West Coast Main Line upgrade project, took far longer and cost much more than under British Rail.
- The ethos of industry-wide cooperation was destroyed and replaced by a culture of competition and blame. 'There is no longer a sense of working together. Questions of delays and attribution of blame strengthen the divide. This has led to a lack of confidence in others' (Ladbroke Grove Inquiry, October 2000, in Wolmar, 2001: 182).
- Vital expertise and experience were lost forever. Since lots of experienced employees were laid off or left Railtrack, there has been a significant drain of know-how and do-how (unwritten knowledge and expertise) in the network (Haubrich, 2001).

In the current analysis of Railtrack, time is conceived as a major indicator of what happened in the rail industry. The sharp division between pre-privatisation and post-privatisation of the rail network seems to convincingly explain why Railtrack failed. The logic of this kind of explanations is straightforward: because Railtrack failed so did the privatisation programme, and vice versa. While the two recent periods in the history of the British Rail industry are separated with a clear-cut boundary, time is viewed as a concrete entity, a container — perhaps even two containers for two periods (before and after the privatisation). It is objectively observable, differentially sequential and wholly measurable. Time becomes historically unrelated, processually undeveloped and theoretically abstracted. The time dimension in this kind of analyses implies that everything occurred after privatisation is just that

resulted from the privatisation programme within the privatisation period, which is unrelated to events before privatisation. Is such logic justifiable? We find that the empirical evidence available does not support such an assumption. For example, let us explore three important indicators over the two periods: accident ratio, under-investment and short-termism.

Accident Ratio

The public's perception is that a strong 'safety culture' with high standards of safety existed before the privatisation of British Rail and that the privatisation programme eroded this culture and resulted in an unsafe railway (see, e.g., Murray, 2001: 56-69). However, the reality tells us a rather different story, that is, the post-privatisation rail industry has actually done better than before in terms of safety. Table 1 shows the annual number of train collisions and derailments from 1989 to 2001. As the rail privatisation began in late 1992 and completed in 1996, we can compare the data within three periods: the pre-privatisation stage from 1989 to 1992, the in-privatisation stage from 1993-1996, and the post-privatisation stage from 1997-2001. In the first period, the average number of train accidents is 421; in the second, the average number is 247; and in the third, the average number is 205. It is obvious that the train incident rate in the pre-privatisation period is more than double of the rate in the post-privatisation period, and the overall trend of train incidents is of a continuing decline. This trend also appears in the figure of significant train incidents from 1992/93 to 2001/02 (see figure 1). Other key safety indicators such as the number of signal passed at danger (SPAD) (see figure 2) and of broken rails (see figure 3) also show a continuing reduction, indicative of an improving safety level over several years after the privatisation. Although safety continues to be problematic after privatisation it does seem that there is a continuum and that safety issues go beyond the artificially imposed privatisation time division.

Table 1. Train incidents over thirteen years

Category	89/90	90/91	91/92	92/93	93/94	94/95	95/96
Collisions	/	290	187	154	135	125	123
Derailments	/	183	144	205	113	149	104
Total	520*	473	331	359	248	274	227
Category	96/97	97/98	98/99	99/00	00/01	01/02	
Collisions	120	127	121	94	106	101	
Derailments	119	93	117	89	93	85	
Total	239	220	238	183	199	186	

Source: Adopted from HSE: 'Railway Safety Statistics Bulletin 2001/02' and Department of Transport: 'Transport Statistics Great Britain: 2001 Edition'. The number with a star symbol (*) is an estimate from a related table in the article 'Another crash, another crisis', *Economist* 21 October 2000.

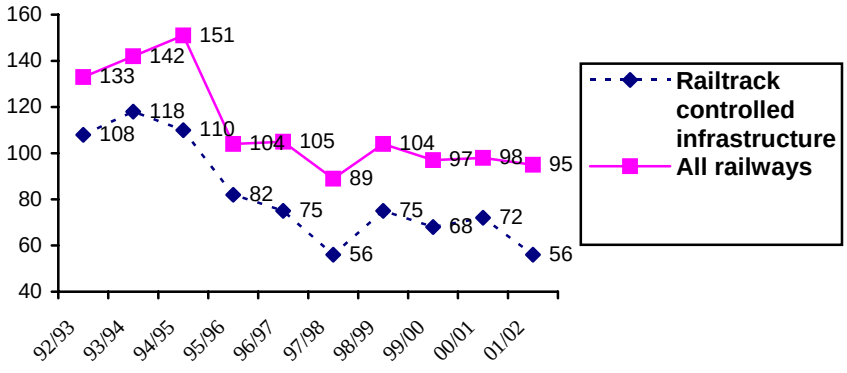

Figure 1. Significant train incidents 1992/93 - 2001/02

Source: HSE: 'Railway Safety Statistics Bulletin 2001/02', available on the web site: http://www.hse.gov.uk/railways/statistics.

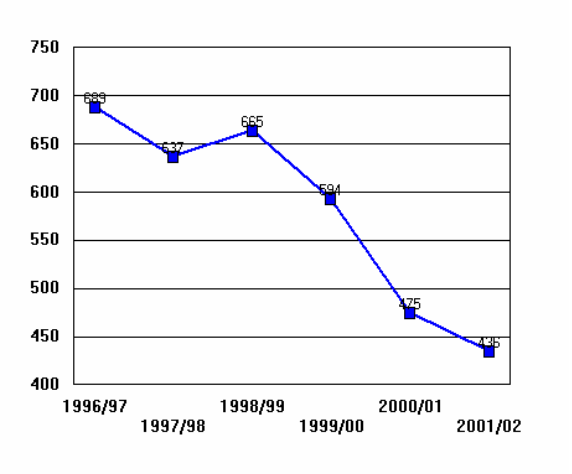

Figure 2. SPADs on the railway infrastructure from 96/97 to 01/02

Source: HSE (2003) 'Single passed at danger', available at the web site http://www.hse.gov.uk/railways/spads.htnl

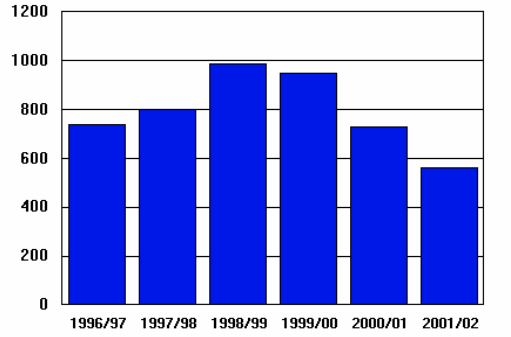

Figure 3. Broken rails from 1996/97 to 2001/02

Source: HSE (2003) 'How safe are the railways?', available at the website http://www.hse.gov.uk/railways/spads.htnl

Under-Investment

Investment is believed to be another major issue after the privatisation. It is assumed that the privatisation and fragmentation of the network inhibited long-term investment, which resulted in an outdated and unreliable railway. However, table 2 shows that investment in the rail network had an overall trend of constant increase and improvement post privatisation. Between 1987/88 and 1991/92, just before the started privatisation of the whole industry in late 1992, the investment under nationalisation slowly increased with an average increase rate of 12% every year. Between 92/93 and 95/96, when the privatisation programme was underway, the investment oscillated around £1,400m. Nevertheless, the total investment within this period (four years) was still higher than that of four years before the privatisation. After the privatisation programme was completed in 1996, investment in the rail network increased sharply by an average increase rate of 19.2% in each year between 1996/97 and 2000/01, while, by contrast, government subsidy continually declined by an average rate of 17.3% per year from 1996/97 to 2000/01 (see table 3 and figure 4). Commentators generally agree that under-investment is one important reason why the rail industry has been unreliable. However, under investment has been an on-going problem for decades. For example, since the early 1960s investment in the rail industry was reduced compared with the late 1950s and remained very low till the early 1990s (see SRA, 2002).

Table 2. Investment in the Rail Industry (£ millions)

Year	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Total investment at 1999/00 prices	1,023	1,055	1,258	1,342	1,600	1,769	1,383
Year	94/95	95/96	96/97	97/98	98/99	99/00	00/01
Total investment at 1999/00 prices	1,439	1,231	1,328	1,628	2,047	2,248	2,905

Source: SRA (2002) 'National rail trends', available on the SRA website: www.sra.gov.uk

Table 3. Central government subsidy (£ millions)

Year	87/88	88/89	89/90	90/91	91/92	92/93	93/94
Central government grants	796	551	479	687	902	1,194	926
Year	94/95	95/96	96/97	97/98	98/99	99/00	00/01
Central government grants	1,816	1,712	1,809	1,429	1,196	1,031	847

Source: SRA (2002) 'National rail trends', available on the SRA website: www.sra.gov.uk

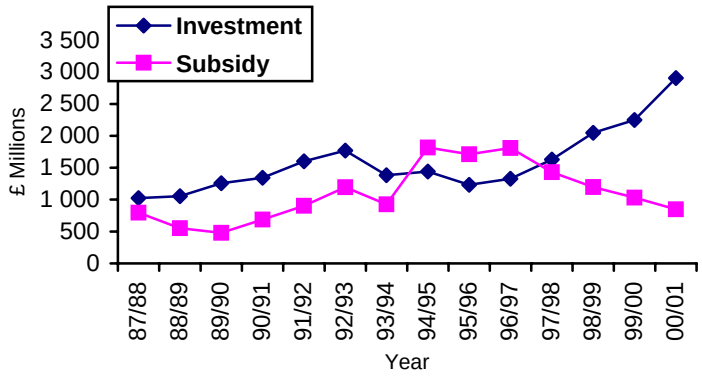

Figure 4. Trends of investment and subsidy in the rail industry

Short-termism

The popularist view is that short-term in Railtrack is thought to be the direct result of rail privatisation. It is not difficult to find evidence that Railtrack managers focused on short-term profit making and shareholder value maximisation and in so doing they have been criticised for failures in safety and customer service quality (particularly while both objectives of profit and safety were in conflict). However, did short-term thinking start after privatisation? We would argue that short-termism in the rail industry is not a new problem. Further, literature suggests that it is a common issue for Anglo-American economies which rely heavily on capital markets (particularly stock markets) that are inherently speculative, psychologically vulnerable and short-term oriented (for surveys of managerial perceptions of short-termism in the UK, see Demirag, 1998; Marston and Craven, 1998). Short-termism has been a major issue in the UK for over a century. Pitt-Watson (1991) notes that since 1900 Britain has spent more on current consumption and less on investment in comparison with its industrial rivals. Under-investment is not just confined to physical assets; it extends to other long-term paybacks such as education, training, research and development, and long-term marketing development. Short-termism is not the sole prerogative of corporate managers but permeates to the owners and financiers of companies. It is a cultural issue and part of the fabric of the British Corporate Governance system.

The above points demonstrate that in analysing Railtrack it is a mistake to assume that time could be conceived as divisible into two separate temporal entities with a clear-cut boundary. This notion also underpins the spatial explanation of the failure of Railtrack. Here space is regarded as a boundary, an abstract structure and environment without fluidity. It assumes that the spatial character of fragmentation of the Rail industry after privatisation is to blame for the network's problems and the failure of Railtrack. However, such an explanation is over-simplistic. However, as discussed above, this reasoning does not stand up to scrutiny. If fragmentation is the root cause of the major problems in the Rail industry, then integration of the network system should overcome its weaknesses. However, evidence shows that the pre-privatisation integrated industry produced much more serious problems. Secondly, in a large survey consisting of more than 50 interviews with industry participants, stakeholders and related specialists in 2001 and 2002 (Mercer, 2002), the vast majority of the interviewees did not think that the integration of train operations and infrastructure management in a single organisation is an optimal solution. This is due to the majority of train operating companies not possessing the experience or capacities to maintain and upgrade the network infrastructure. Thirdly, blaming the multiple commercial contracts under the separation of track and train and the competition of train operating companies is doubtful, since commercial contracts are the only possible way for free market exchanges to take place and usually they work effectively in all business areas. For example, the success of large Japanese business is based on the linkage with multiple and numerous subcontracts. A single hierarchical structure does not necessarily produce more efficient and effective business management than market competition.

Rethinking Railtrack: Indivisible Time and Inseparable Space

In processual thinking time and space are not separated from the object of studies, nor imposed from an external framework of reference. Rather, time and space are inherently embedded in processes (or clusters of processes) themselves as features and configurations. This implies that time and spaces are ongoing processes in nature, rather than separate and fixed entities, containers, external environments or any abstractions. What does this mean to the running of the rail network post privatisation? What are the implications for Railtrack?

First, for our analytical convenience, let us identify the typical spatial patterns embedded in the rail system post privatisation without considering its processual development over time. Contrary to popular belief, we would argue that the rail network after privatisation was interconnected, interlinked and interactive. It was, as a matter of fact, a complex hierarchical system consisting of loosely linked units (see figure 5). At the head of the hierarchical structure was the Rail Regulator who directly controlled Railtrack and the train operators and their linkages by its parliamentary-authorised special power (independent of the government) such as modifying and enforcing the network and operating licenses, approving track-access agreements and controlling track-access charges, and regulating competition between train operators. So, the rail regulator maintained a pinnacle position at the top of the hierarchical system by overseeing Railtrack and train operators in many key areas. Close to the top of the hierarchical framework were other regulatory bodies, such as the Office of Passenger Rail Franchising, Rail Users' Consultative Committees, Her Majesty's Railway Inspectorate, and the Strategic Rail Authority (Charlton, 2000). All these authorised bodies formulated a control network covering all the aspects of the rail system after privatisation. Gerald Corbett, the former CEO of Railtrack, complained that he had to deal with more regulators than any other privatised industry (Economist, 21 October 2000). On the second tier of the hierarchy was the privatised monopoly Railtrack, on which the rest of the rail industry depended. Railtrack owned and controlled all the rail infrastructure, signed contracts with all train operators and maintenance suppliers, and monitored compliance with conditions of track access imposed by Railtrack, and dealt with penalties on train operators for train delay (Edmonds, 2000).

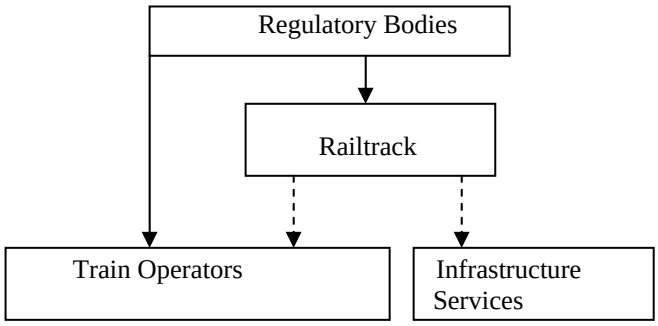

Figure 5a. The organisation of the railway industry post-privatisation

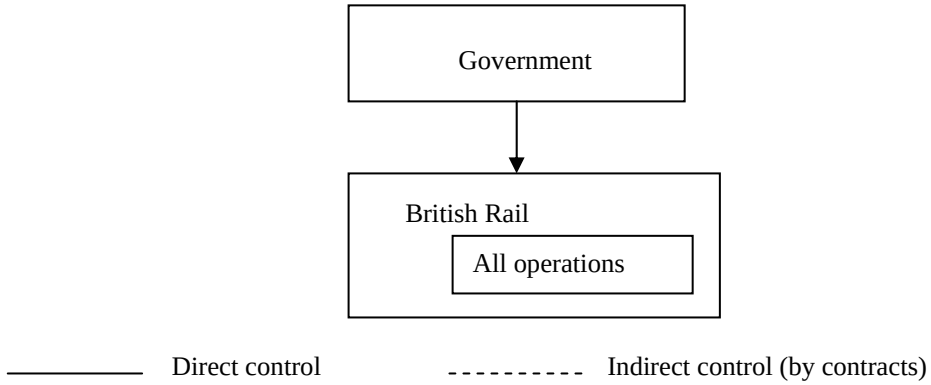

Figure 5b. The organisation of the railway industry pre-privatisation

However, this hierarchical system was not the same as that under nationalisation, where a single supervisory power from the government to British Railway and from the company board to its operating units (based on either regions or business sectors) existed. The monitoring system after privatisation

was formed under both concepts of 'tight control' and 'free competition'. Surely, it is the ideology of market fundamentalism and competition underpinning the privatisation programme that decomposed the previous integration of rail network and empowered Railtrack and train operators and other rail services to become private, independent and commercial organisations. The purpose of all these privatised companies was the same as any other commercial company that of making profits by servicing customers. Thus, the linkage between Railtrack and train operators and other services was basically commercial and contractual, although the latter depended on the former and the former possessed power of monitoring over the later. The concept of tight control was the result of political battles between the Conservative government and the Labour Party in the early 1990s, while the later opposed the privatisation plan and finally had to compromise with the former by requesting tight control as the condition of concession (Shaw, 2000). Consequently, the privatised network was run and driven by a mixture of both market competition and strong regulation, which was distinct from other privatised firms. The regulation aimed to maintain the level and quality of train services after privatisation regardless of whether they were profitable or loss-making (Swift, 2000: 205), which was, however, contradictory to the commercial imperative post-privatisation and not in the interest of shareholders in the newly privatised companies. The regulatory relationships between the authorities and the privatised companies was based on agreements and commercial instruments, such as the allocation of subsidies, approving expenditure proposals, determining and changing train access charges and rewarding, compensating and imposing penalties. The consequences of such a control approach were complicated: on the one hand, the tight economic control was significant to the profitability of all those privatised companies (for example, over 90% of Railtrack's revenue was fixed by the regulator regardless of number of trains); on the other hand, as private companies, all of them pursue profits and director 'slack' (profits, shareholder value, directors' remuneration, etc.) and in so doing they might resist or refuse or ignore regulation. This created a tension between the rail regulators and Railtrack and train operators. In addition, because of the overlap and confusion of duties among the regulatory bodies, inevitable conflicts and tensions existed between the Office of Rail Regulator and the Office of Passenger Rail Franchising and the Strategic Rail Authority (see e.g., Swift, 2000). Rules and standards thus became complex and inconsistent and lack of transparency in general, particularly in safety concerns. As many regulators existing, no single body was responsible for balancing safety with the cost of safety (Mercer, 2002).

Such a spatial pattern was not imposed from outside as a pre-given structure. It was the temporal and emerged result of dynamic interplay and interactions of various and multi-layer processes. We may categorise all these processes into three layers: the rail network process, the contextual process, and the societal process. Each layer is *artificially* divided for analytical purposes with all the layers being interconnected and interactive. The rail network process consists of four groups of processes: regulatory, Railtrack, train operations and rail service. Overlying the rail network process is the contextual process which consists of four processual groups: political, economic, social-cultural and technological. Each group had its own subordinate processes and events. Each was interacting with other groups and categories of processes. Society itself also has its own processes such as life and death, reproductions and social activities. However, society is not divorced from surrounding processes. Under the conventional approach that space is regarded as a separate entity containing all the above processes (actually, 'things' rather than processes in the traditional mindset). For the Rail network space consists of the patterned configuration of all the above processes, all interconnecting and interacting with each other. Similarly, the spatial pattern was not simply imposed from the outside but rather consists of everyone, every event and all activities associated with the Rail industry in which everything is processual, intertwined and interactive. Under this approach the environment is seen not as an abstraction, nor as a fixed entity but as a fluid and integrated host fully interacting with the Rail network. As Weick (1979, 1995) argues, 'we are not just simply influenced by environment; we may enact environment and influence environment'. Therefore, the spatial structure of the rail network after privatisation features dynamic interactions of all processes involved, both directly and indirectly. Here, the environment forms an integral part of the interacted processes as the base of the spatial structure (see figure 6). For example, the complex hierarchical structure of the rail industry after privatisation was the result of the outcome of the political processes of negotiating, resisting and eventual compromise between the Conservative Party and the Labour Party, between the independent Regulator and the Government, and between the regulatory bodies and Railtrack and other companies. The political processes were inherently embedded and featured in the organisational structure, rather than alien to the structure. Adding the time dimension to the spatial pattern of rail network we see a processual pattern emerging where the spatial configuration of complex hierarchical structure after privatisation is only relatively and temporarily stable and identifiable. Any spatial pattern can exist and appear stable for a short period but ultimately it is not separable from the past and the future.

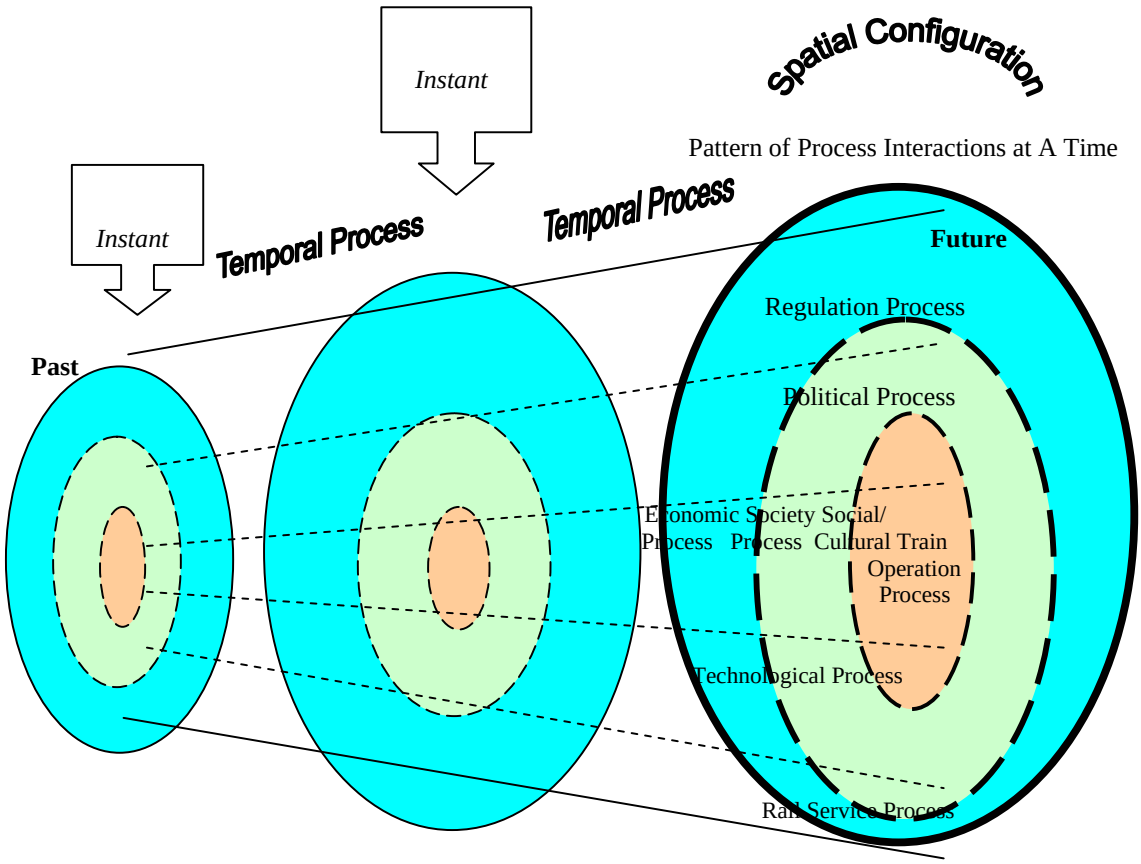

Figure 6. Processual time and space in the rail industry

A processual pattern is a complex web of interactions of all present processes together with learning from earlier events, since each current event in a process is the integration of all past experiences (Jungerman, 2000). Both process and processual patterns develop over time. Figure 6 illustrates that processes in each layer have their own histories and origins and their current processual states incorporate past experiences and interactions with other layers. An example of the continuum of time is given in the bureaucratic hierarchical system of the Rail industry both before and after privatisation. After privatisation it was overburdensome and in many instances no less bureaucratic than the former system under nationalisation. Rail workers demonstrated that they had more paperwork than ever. Signallers said that 'each signal box has a library of books, files, folders, instructions, but it's all just there to cover the backs of the mangers. It's so complex that the troops don't understand it and haven't got time to read it all'. 'The bureaucracy is unbelievable' (Murray, 2001: 95). A TOC manager gave another example: when they wanted to build a new car park at a station they managed they had to submit a proposal to the Regulator in addition to negotiating with Railtrack, but the proposal was not approved for over eight months and was still waiting then (Murray, 2001: 85).

Much of the criticism of Railtrack centres on safety issues, such as train accident, underinvestment and short-termism. However, it is quite apparent that these were not isolated to the post-privatisation period but had history dating back many years before privatisation. For example, many fatal train accidents, such as the Ladbroke Grove train disaster in 1999 (31 people died and 425 injured), resulted from signals passed at danger (red signals) (SPADs). However, SPADs frequently happened under the pre-privatised British Rail. From 1967 to 1997, there were 30 fatal train accidents due to driver errors (SPADs, excess speed, and overrun) and 45 due to other causes, including operational errors by signalling staff, signal defects, rolling-stock defects, obstruction on the line, broken rails and the failure of the infrastructure. Of the 30 accidents, most (22 or 73%) were contributed by SPADs (Evans, 2000). The major cause of SPADs seems not to be significantly related to such excuses as invisibility or location of signals, the complexity of track, the experience of divers, or simply, the privatisation programme itself, but rather related to some deeper historical and cultural sediments. Before the Ladbroke Grove train accident, the same signal had been passed at danger eight times in the previous six years by different drivers (*This Is London*, 29 October

2001). It is observed that train drivers have disobeyed signals both before and after privatisation. Indeed Jack (1999) suggests that this problem dates back to C1830 when passenger trains first began to run.

> *Consequently, there was a long history of SPADs, in fact so deeply entrenched was this culture in the Rail industry that there was no proper investigation process. No one spotted the relevance of SPADs. No one drew conclusion form them. No one applied any statistical analysis to them to see what lessons could be drawn.*
>
> (Associated Society of Locomotive Engineers and Firemen, quoted in Law, 2000: 6)

Thus, it could be reasonably inferred that the Ladbroke Grove disaster was one of many disasters waiting to happen. The attitude and behaviour of the Rail industry staff (or '*prevailing practice*' as the Ladbroke Grove Rail Inquiry uses to describe unjustifiable behaviours such as train delay and slow reactions) are also reflected in Railtrack which totally ignored three written warnings about the Ladbroke Grove junction by First Great Western before the crash (*This Is London*, 29 October 2001). Compared with other European countries the British Rail industry has the worst safety records. [2] Also, in Japan no any passenger has been killed on any express line since 1964 (Economist, 21 October 2000). Should we think about any societal and cultural differences between countries? It is apparent that a lack of care and a tendency to ignore, neglect and slow response to events are evident. This is combined with a tendency to talk about, document, meet, argue and blame instead of taking actions - swiftly and decisively.

The privatisation programme was said to be aimed at overcoming the problems in efficiency, safety, investment and service quality. It was assumed that the introduction of market and competition into the rail industry could automatically lead to a better railway system. However, historical legacies (social, cultural, philosophical, ideological, political, etc.) in society may consciously or unconsciously influence our modes of thinking and ways of doing things. We can see that short-termism in Britain has had more a one hundred year history which is underpinned by individualism which has had more than five hundred years history (Macfarlane, 1978). Further, the 'profit' culture has developed in tandem with capitalism over the past three hundred years. These cultural and social legacies are not just confined to the rail industry but permeate throughout society. It is our contention that privatisation was therefore not the initiator of short-termism, profit motive and individualism in Railtrack but rather were inheredited from the past and from society '*writ large'*. We do believe that this culture, perhaps precipitated by privatisation, contributed massively to the failure of Railtrack.

Processual development is not simply a historical repetition there must always be some novelty introduced to add intrinsic value in each process. The Rail industry did develop some new characteristics during various stages of its history. These developments were particularly linked with the shifts in political ideology and may have more influence than other processes. Privatisation in the UK began in the early 1980s and was the product of ideological beliefs of the Conservative Party which essentially favoured private property and the free market to state control (Veljanovski, 1987; Miller and Simmons, 1998; Shaw, 2000). The faith in private ownership is in direct contrary to the once popular ideology of public ownership favoured by the Labour Party. Oliver Letwin, an adviser to former Prime Minister Thatcher, admitted in 1988 that privatisation represented an ideological belief ('a fundamental distrust in the state running things'), rather than business efficiency and shareholder interests as claimed publicly by the Conservative government (see Shaw, 2000: 4). The privatisation of the Rail industry, from the outset did not make sense since the performance of British Rail had been improving and its efficiency was regarded as the best in Europe in the early 1990s (see Wolmar, 2001: 55). It is the ideology of privatisation itself that drove the privatisation of the Rail industry (an interesting story describing how the idea of railway privatisation was developed is quoted in Norris, 1996). As the then-Secretary of State for Transport clearly stated, the railway privatisation 'was something a Tory minister was *bound* to want to do' (quoted in Shaw, 2000:11, emphasis added). Of course, the plan of selling British Rail was strongly opposed by the Labour Party that threatened to restore 'a publicly owned and publicly accountable railway' (Economist, 1 June 1996) in the future (this prophecy was fulfilled in 2002). Unable to hinder the Conservative's privatisation programme, the Labour Party finally compromised it by insisting on tight control over the rail network after its privatisation. Within this context, the Office of Rail Regulator was particularly interested in a position of placing Railtrack into an adversarial position with its customers, the train operators, rather than in regulating them (Wolmar, 2001: 116). The regulator imposed huge monetary penalties on Railtrack for poor performance which tended to bring negative rather than positive results. On one hand, in order to avoid fines of millions of pounds, Railtrack would rather reduce or stop services by closing some lines. On the other hand, in order to make profits, the only way Railtrack could do was to cut costs further, such as the costs of track maintenance and employment. The consequence was that both performance and safety were compromised.

Conclusion

With hindsight it does seem inevitable that Railtrack was bound to fail. All the observable and invisible

factors contributed to its failure since Railtrack was interlinked with all the processes in society. However, not all these factors/processes have the same effect on it in a time. This paper is not aimed at exploring why Railtrack failed but rather developing an understanding of the issues through over time and space. We offer two major reasons to enhance understanding of the failure of Railtrack.

First, Railtrack was born out of a particular ideology of market fundamentalism and finally became the victim of ideological conflicts between opposite paradigms of market freedom and tight control. Arguably, Railtrack was the logical outcome of the entire privatisation plan of the Conservative government over the 1980s and early 1990s. The origin of privatisation can be traced to the historical ideology of the Party itself. The privatisation programme entitled Railtrack, as an independent private company, to legitimately pursue its own purpose of profit maximisation and shareholder interest. However, tight control bound Railtrack via a hierarchical structure of rail regulation. Thus, Railtrack faced a major dilemma. The disciplining forces of the stock exchange compelled Railtrack to make profits and improve efficiency; otherwise, it would die. However, tough regulation did not give Railtrack the freedom to maximise profit while regulators continually asked that more be spent on improving performance and safety. For survival, Railtrack had to cut costs and stop some services, even at the expense of safety and public satisfaction. Railtrack also had no incentives to improve the network because of the fixed revenue stream imposed by the regulator. Behind the dilemma and conflict of interests was the interlinkage with politics. As the *Economist* comments, Railtrack 'was never going to escape from political control' (13 October 2001). Railtrack was announced dead, as a result of insolvency. Could we ever have imagined that Railtrack might be declared bankrupt under a Conservative government?

Second, the effect of socio-cultural and historical public sentiment on the Rail industry made it impossible for Railtrack to escape from public and political attack. It is said that public confidence in Railtrack was shaken and political hostility increased quickly after three fatal train accidents in 1997, 1999 and 2000. However, it is difficult to say whether these accidents resulted solely from privatisation given that there were equally serious fatal train accidents during the prior period of nationalisation. The multitude of blame on Railtrack include: Short-termism, monetarism, distrust, non-cooperation, arrogance, greedy and a blame culture are all reasonable. However, these are not simply confined to the Rail industry nor are they the sole cause of the problems in the Rail industry nor were they triggered by privatisation. In fact, moral and ethical failings have been associated with the development of capitalism for centuries, particularly in a society where individualism or self-interestism is more popular than collectivism or unitarism (March and Olsen, 1995; Letza and Smallman, 2001). Could we imagine that in Japan trains might pass the same red signal repeatedly place or train managers might ignore three repeatedly written warnings of danger? Undoubtedly, Railtrack's operations were not isolated from the societal context and it was impossible for Railtrack to isolate itself from the historical and socio-cultural context.

Our examination of the issues surrounding the failure of Railtrack is patently different from the current mainstream analysis, which claims that privatisation and fragmentation of the rail industry is to blame for the failure of Railtrack. The conventional taken-for-granted analysis is not convincing as it focuses on a sharp division of time between pre-privatisation and post-privatisation of the network and assumes that Railtrack's problems surfacing post-privatisation. Thus, privatisation itself is the sole or main contributor to the failure of Railtrack. The current analysis also asserts that the spatial character of fragmentation of the network after privatisation caused Railtrack to fail. Post-privatisation the spatiality of the rail network is assumed as a split without interconnections, interactions or interdependencies. These assumptions might be reasonable if we regard time and space as fixed container, separate and abstract entities and imposed externally. Indeed, this static approach inherited from the Newtonian concepts of absolute time and space has widely been used in analysing social phenomena in modern time. However, with the recently increasing questioning on the traditionally dominant mode of thought in the academic circle and in practice, its credibility and validity have been seriously concerned. We argue that understanding time and space dimensions in a processual perspective offers more convincing explanations of Railtrack's problems. In this regard, time and space are not fixed entities or independent from processes. The whole rail network is processually developed in history and its processes are inseparable from other processes such as social, cultural, political and economic processes in the society. All those process are interconnected and interactive. The processes of the network development after privatisation were inseparable from the processes before privatisation. Time is indivisible and division is only artificial or socially constructed. The spatial structure of the rail network after privatisation was not as fragmented or separated as suggested by the existing mainstream analysis, but interlinked within a complex hierarchical structure with the concept of tight control. Therefore, in order to know why Railtrack failed, we must see what lay behind Railtrack — processes rather than property, dynamic rather than fixed, interconnected rather than separated, interactive rather than inactive. The failure of Railtrack is the result of the interaction of all these processes.

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