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The Paddington rail crash: keeping things in perspective

It must never happen again. But it will. With the benefit of hindsight most accidents are preventable. The problems lie in the future.

There is certain to be a knee jerk reaction to the most recent crash. There will be calls for more money to be spent on rail safety in the form of more sophisticated signalling and control systems - systems that will make the railways "failsafe" and "foolproof". Unfortunately such systems do not exist.

Yesterday's papers all contained speculation about what an inquiry will find. Was the accident caused by human error or equipment failure? The presumption underpinning this question is that if human error can be blamed then the case for better - more expensive - equipment is made. But equipment failure is only another form of human error and human error can never be eliminated from systems designed, built and operated by humans.

Certainly new control systems - if they work - can render some forms of behaviour such as passing a red signal - impossible, but they relocate rather than eliminate the source of possible accidents. The channel tunnel boasts the newest and most sophisticated railway signalling and control system in the country - and shortly after opening had an accident closing it for months.

Technological solutions to safety problems have a history of disappointing. One of the most obvious problems associated with fool-proof and fail-safe systems, which still depend on a residual amount of human management, is their propensity to reduce he vigilance of the residual managers. If **nothing** is supposed to go wrong why should anyone stay alert watching for something that is not supposed to happen. Ship safety specialists refer wryly to "radar-assisted collisions", and keeping long-haul pilots awake is becoming a problem as more and more of their job is taken over by computers.

How much money should be spent on transport safety, and how and where should it be spent? If £1 billion more is spent on Automatic Train Protection to make the railways safer, as John Prescott is being urged to do, this money will ultimately come out of the pocket of the passenger. And there are other, non-monetary, ways in which the pursuit of safety can increase the cost of travel. Last month London Underground closed 7 stations for safety inspections causing great inconvenience to users. At the margin, as economists like to say, anything that increases the cost of rail travel will drive people off the rails and into cars and sometimes planes - both of which have worse accident records per mile travelled.

There are no known systems for moving people about that are risk free. Risk management is a balancing act. The emotion-charged atmosphere and media-fuelled outrage that accompany large accidents are not conducive to performing it sensibly. People move about for a purpose; there are rewards for travel which must be weighed against the risks. The single-minded pursuit of safety at any price runs the risk of

driving worthwhile activities out of existence. If no one travelled there would be no transport accidents, but many would starve.

Privatisation has had a problematical effect on the way the balancing act is performed. Certainly, if confronted by the simple choice of spending money on safety or directors' salaries one can see a temptation to compromise safety. However the growth of the compensation culture - the privatisation of risk - is producing pressures in the opposite direction; it is transforming physical accidents into large financial accidents. One might expect that this would make people more safety conscious. But instead it appears to be fostering the growth of a blame culture in which the most important accident to be avoided is legal liability. Management tries to blame the workers and the workers the management. All these pressures have hugely increased the demand for risk assessments, whose principal purpose is not safety but an anticipatory shifting of blame should anything go wrong. The result is likely to be a less safe railway *and* a less efficient one.

A safety culture need not be in conflict with an efficiency culture. The most effective safety measures are rarely the most expensive. Vigilant pilots and train drivers are usually paid as much as sleepy ones. A fearful and disaffected workforce that can see little connection between a job well and safely done and the rewards - paid in the form of both money and collegial esteem, is unlikely to care much about safety or efficiency. This is the lesson that one hopes, but does not expect, will be drawn from the latest Paddington disaster.

It is not possible to run a railway that will never have an accident. But it is possible for Britain's railways to be run more safely and more efficiently