COMPENSATING VICTIMS OF DISEASES

JANE STAPLETON

Serious distortions underlie the modern debate on the future of tort law as a method of compensating the victims of personal injury. These distortions arise from the debate's focus on accidents and from the neglect of issues raised by other types of personal injury where the injury cannot be unequivocally pinpointed to a certain time and place, but where the source is man-made and could potentially give rise to a civil action for damages. Such actual or apparently non-traumatic injuries, which I shall loosely term 'man-made disease', are not unusual. They include, for example: occupational injuries such as dust diseases, repetitive movement injury, deafness and dermatitis; product injuries such as diseases from tobacco (which causes 100,000 premature deaths a year in Britain)\(^1\) and chronic adverse drug reactions; and environmental injuries such as diseases caused by fertilizers and man-made radiation. Indeed, many of the cause célèbres which have fuelled interest in the reform or replacement of tort law in the personal injuries field have involved hazards which fall into this broad class of injury: asbestos, thalidomide, diethylstilbestrol (DES), agent orange, etc. But despite this, the reform debate is focused on accidents.

The bias to accidents is readily explained for, although the law of torts does not formally sanction preferential treatment of accident victims, its conceptual machinery dramatically favours this class in practice. As a consequence effective tort liability is principally confined to cases of traumatic injury.\(^2\) Ironically this has led critics of the tort system to concentrate on accidents and to neglect some of the most damaging arguments at their disposal by overlooking the greater barriers the system presents to victims of negligence which happened to result in non-traumatic rather than traumatic injury. This neglect has in turn had a profound impact on the debate on the adequacy of the law concerning compensation for personal injuries and on reform proposals.

\(^*\)Lecturer in Law, University of Sydney. This article summarizes some of the main themes of a. D. Phil. thesis, the full text of which is being prepared for publication. The author would like to thank Professor P. S. Atiyah for his supervision of that thesis.

1 Comparable distortions arise in the debate on the value of tort law as a deterrent to personal injuries, but these are not dealt with here.
2 Imperial Cancer Research Fund Cancer Epidemiology and Clinical Trials Unit (ICRF, London June 1983) 3.
3 In fact to a subclass of accidents—work and road accidents—where in practice there are fewer legal and logistical barriers to a successful claim, see Royal Commission on Civil Liability and Compensation for Personal Injury (ch. Lord Pearson) (March 1978) Cmd. 7054 (hereafter 'Pearson') Vol. 1, paras 37, 79–9.
COMPENSATING VICTIMS OF DISEASES

This article outlines the problems faced by victims of man-made disease in recovering damages in tort and how these difficulties are not satisfactorily resolved by the introduction of stricter liability or non-tort schemes limited on the basis of cause. Only a non-tort scheme based on disability rather than cause can overcome these difficulties, yet a real commitment to such a ‘needs’ basis for reform leads to a novel set of options, some of which turn conventional reform wisdom on its head. Ultimately a focus on disease requires a broader perspective in the debate on public schemes to provide for the disabled and their relation to systems of support for victims of other forms of misfortune.

CHARACTERISTIC BARRIERS TO DISEASE CLAIMS IN TORT

(a) Problems relating to time
The class of cases which I have labelled ‘man-made disease’ have one characteristic in common; that although they stem from a man-made source the injury cannot be attributed to an isolated and identifiable time and place. This may be because the injury is of gradual contraction during prolonged exposure to a health hazard—such as deafness from noisy work conditions—or it may be because there is a latency period before the effect becomes apparent—such as some cases of infection. Often the case involves both gradual contraction and latency; a well-known example has been the pneumoconioses due to inhalation of dusts. There is also a large number of latent disease cases—many cancers fall into this group—where the mechanism of contraction is so obscure that it is not certain whether the disease was triggered by an isolated event or whether it was contracted over time. But whatever the mechanism of contraction and whether it is known, an intrinsic legal problem with latent disease cases is that, because it takes time for the damage done to the body to result in manifest symptoms, a victim may have been away from the harmful exposure for a considerable time before he exhibits the damage which his earlier exposure had caused. In the past this characteristic led to a major barrier to many disease claims: by the time symptoms appeared and were correctly attributed to a hazardous exposure in the victim’s past, the limitation period for the claim had expired.4 The injustice this caused the victims of disease precipitated a fundamental change in the law and

---

4 See, e.g. Cartledge v Jopling & Sons Ltd [1963] AC 758. In personal injury cases English courts clearly rejected the ‘discovery’ rule—that damage and, therefore, accrual of action occurs only when damage is discovered/discoverable. In the USA there is still much confusion on the point—see Anon, ‘Preserving Causes of Action in Latent Disease Cases’ 68 Virg L Rep 615 (1982). Compare also the brief, now ended, ascendance of the discovery rule in England in latent physical damage cases, see Pirelli General Cable Works Ltd v Oscar Faber & Partners [1983] 2 AC 1. Under workers' compensation schemes latent disease cases were often time-barred by mandatory recent exposure requirements, see e.g. Dean v Rubian Art Pottery Co Ltd (1914) 7 BWCC 209.
policy of the law of limitations, culminating in the present overriding discretion in the court to allow a claim otherwise out of time to proceed.\(^5\)

Although the limitation problem has now been adequately resolved, another
difficulty remains arising from the latency of disease. Where damage manifests
itself long after the harmful exposure it may no longer be possible to identify or
trace the wrongdoer, while the possibility—also present in accident cases—that
the wrongdoer may even have gone out of business in the interim, is much more
real.\(^6\) Where the disease is or appears to be contracted by gradual contraction this
also leads to more apparent and more acute apportionment problems than appear
in accident cases.\(^7\) If a disease is contracted gradually there is more likelihood that
some damage has occurred outside the formal limitation period or from a source
not due to the defendant's negligence. The latter may be under the defendant's
control or it may be due to the conduct, negligent or not, of a third party or to
some natural source. Apportionment issues in these cases can be particularly
complex and the outcome of a case correspondingly uncertain.

(b) Medical causation

In general the most important barrier to the success of tort claims for man-made
disease is medical causation. Again this arises from the fact that the disease may
be both contracted gradually and take time to manifest symptoms. In these cases
there are grave problems in the initial recognition that a particular hazard Z may
produce the particular disease from which the victim is suffering. This is
especially the case where the effect is subtle, such as behavioural or mental
impairment, or indirect, such as manifesting itself in a later generation or in those
who mix socially with those primarily exposed.\(^9\) Even when the possibility of an
etiological link is established to the hazard Z in the general case, the victim
usually faces the problem that other conditions can also produce the disease and it
must then be shown on the balance of probabilities that his particular case was
due to the hazard under the negligent control of the defendant. When the
biological effect is not immediately apparent this nexus may only be provable
statistically. Where this is the case the outcome is intrinsically crude.

---

5 See Limitation Act 1965 (c. 47) (Initial Reform); Limitation Act 1975 (c. 54) (incorporating the
discretion); the Limitation Act 1980 (c. 58) (current consolidating Act).

6 Well-known examples here are, respectively, generically prescribed pharmaceuticals (e.g. DES)
and Welsh slate quarries.

7 Illustrative cases include Smith v Central Asbestos Co Ltd [1971] 3 WLR 206; Cartwright v
G.K.N. Sankey Ltd [1972] 2 Lloyds Rep 244; Crookall v Vickers-Armstrong Ltd [1955] 1 WLR
659; Wallhead v Rushton & Hornsby Ltd (1973) 14 KIR 285; Thompson v Smith Shiprepairers

8 A well-known example here is Bonnington Castings Ltd v Wardlaw [1956] AC 513.

9 Examples of indirect effects include vaginal cancer in the female offspring of pregnant women who
took the drug DES; the contraction of disease by those who work or live with smokers; and the
contraction of mesothelioma cancer by cohabitees of workers whose clothes are contaminated by
asbestos dust.
COMPENSATING VICTIMS OF DISEASES

For example, in the general population two in 1000 may suffer bronchitis but in a certain industrial process X the incidence may be higher, say, three in 1000. Given a sufficiently wide data base it is possible to conclude that one in three victims employed in this industrial process is suffering a work related illness but there is no way to prove which one of the three it is. Overall statistics alone can be used. Only if the total incidence in the process is more than twice the general incidence (i.e. more than four per 1000) can the individual victim show that his illness is more probably than not work related. In situations where the disease’s incidence is up to double or exactly double the general incidence, no individual can prove work-relatedness (so all fail to prove causation) even though, say in the latter case, half are in fact work-related cases. On the other hand in situations where the workplace incidence is, say, five, all victims of bronchitis from those workplaces can show that their illness was more probably than not work related even though two of the five are not work related. In fact, the basis for such relative probabilities is usually incomplete, ambiguous or simply unavailable. The overall result is that while most accident victims have no difficulty in showing a causal connection between the wrongdoer’s hazard and his injury, proving this medical causation is characteristically the most important barrier to successful tort claims for man-made disease.

Non-tort schemes based on the cause of injury such as industrial compensation (workmen’s compensation, industrial injuries schemes, etc.) and private pharmaceutical compensation plans also suffer from the gross approximation of an all-or-nothing causal test based on poor statistical evidence. In the past mandatory exposure rules and restriction to certain scheduled diseases were used in industrial compensation schemes to increase the likelihood of the necessary causal nexus in an individual case but at the cost of excluding many valid claims. Nevertheless, the recent calls for a system of individual proof in the industrial injuries scheme\(^{10}\) seem to ignore the fact that such a reform does not overcome the dilemma of how cruelly a causal rule inevitably operates where the only evidence is statistical. As the example above showed, it is either overinclusive or underinclusive. The clash between the twin goals of a scheme’s coverage rule—to include those cases of disease which fall within the scheme and to exclude those which do not—is intrinsic and irreducible in such cases. Allowing a system of individual proof may shift the balance towards the former goal but it does nothing to resolve the basic conflict. In short, since diseases typically raise these intractable problems of medical causation provable only by statistics, as a class they provide the strongest practical arguments against coverage rules based on cause. Moreover, since the necessary statistics are so rarely available, few disease claims succeed

even in schemes that formally would include them, so that diseases arguably also provide the most potent examples of the injustice of a cause-based rather than needs-based system.

(c) Proof of fault

There are many intriguing liability questions which disease cases could in theory be presenting to the courts, examples here being the important issues suggested by the 100,000 premature deaths in Britain each year due to tobacco and the remarkable remoteness of damage questions which would be involved in cases of environmental contamination. That these issues have not been significantly explored is an illustration of the difficulties in getting over the threshold problem of medical causation in the relevant cases.

Even when causation can be established, the fact that a victim may have been exposed over a considerable period of time to the disease-causing conditions creates particular difficulties both for fact-finding itself and for the judgment of these facts. In a claim of negligence the court must assess when and to what extent a risk of disease ought to have been appreciated—the ‘knowledge’ question—and the adequacy of the defendant’s response to this level of knowledge—the ‘response’ question. This usually raises much greater difficulties than in cases of trauma because the risk is more often not obvious but insidious and concealed, and its appreciation depends on knowledge acquired through means other than common experience. The court may be forced to put great reliance on expert evidence as to what should have been known and this evidence is often more available to the defendant. Moreover, fault is not to be analysed at any one point in time but over a period, and this increases the complexity of both the knowledge and response questions as well as having implications for the assessment and apportionability of damages. All these problems are made more difficult by the fact that the relevant exposure period of latent diseases may be many years—even decades—before trial, making it more likely that crucial evidence has disappeared or became ‘stale’ and unreliable. The complexity of proving fault in these circumstances makes disease claims characteristically costly while the heavy reliance on expert evidence increases the uncertainty of result in practice since more then depends on the forensic credibility of those giving evidence.

Usually the few disease cases where medical causation from an identifiable defendant can be established are cases where the victim has been exposed to a hazardous man-made or natural product. In some of these cases the disease will be due to some impurity introduced into the article during the manufacturing process. Grant v Australian Knitting Mills¹² is a well-known example of such


¹² [1936] AC 85.
'manufacturing defect' cases. More typically the hazard is inherent in the design of the product, well-known examples here being asbestos and thalidomide. Now it is not exactly clear why, but in design-defect cases reaching court the claim is almost invariably one of inadequate control of the hazard rather than that the creation of the hazard was itself negligent. This being the case, the issue of adequate monitoring of potentially hazardous designs assumes crucial importance. However, with disease cases this is considerably complicated by the problem of latency—how long after exposure must monitoring be kept up and at what level? Another problem is that certain products are addictive as designed and this raises complex issues of where the balance lies in such cases between the defendant's duty of care and the victim's contributory negligence or voluntary assumption of risk. A third problem is that certain victims are abnormally susceptible to certain disease hazards—not all miners will become disabled by pneumoconiosis, not all typists will develop tenosynovitis—and in the employment context this raises questions of conflicting duties and policies: the duty to protect the employee's health and duty not to discriminate, for example, on the basis of the employee's sex. These are all areas of uncertainty, adding to the relatively high uncertainty of outcome in disease cases even where medical causation can be established.

SUGGESTED REFORMS

(a) Limited reforms

Since the importance of the existing pockets of strict liability is negligible here, where fault cannot be proven victims generally go uncompensated in tort law. In particular, this will always be the case for victims of risks which were not known nor reasonably discoverable, and victims of risks unavoidable by reasonable means which were known but acceptable in view of the utility of the activity. Concern that these innocent victims of socially sanctioned activity go uncompensated by tort law has been a major factor in recent calls for stricter tort liability for personal injuries and in some limited cases for the replacement of tort by some other compensatory mechanism.

13 On rarity of negligent design claims see C. Miller and P. Lovell Product Liability (Butterworths, London, 1977) 208 ff. A similar situation may exist in some USA jurisdictions, J. Henderson 'Judicial Review of Manufacturer's Conscious Design Choices: The Limits of Adjudication' 73 Colum L Rev 1531, 1559, 1568 (1973). A rare example of such a claim in an English disease case is Darvill v C & J Hampton Ltd (1972) 13 KIR 275 (an industrial dermatitis case) but the issue was not decided because no supporting evidence had been called.

14 There is a dearth of case law on the point but one important case is Wright v Dunlop Rubber Co Ltd & ICI Ltd (1972) 23 KIR 255 (industrial cancer).

15 See, e.g. Stoker v Guest, Roe & Nettlefold (Bolts & Nuts) Ltd [1968] 1 WLR 1776 (duty to monitor); Darvill v C & J Hampton Ltd (1972) 13 KIR 275, 284 (per Rees J, possible pre-employment screening duty); Page v Freight Hire (Tank Haulage) Ltd [1981] ICR 299 (sex discrimination and dismissal on grounds of risk to health).
However, there are major intrinsic problems with, say, stricter products liability or a limited non-tort system of compensation. Principal among these is the problem of 'risk definition', i.e. of determining which risks should be allocated to which enterprises to promote the policy goals behind the reform. A related problem in the area of stricter products liability is that if the stricter liability is to be predicated on a product having been 'defective', what are to be the guidelines in assessing 'defective design', the typical disease case? From the disease victim's viewpoint other difficulties with specific reform proposals in this area include the following:

1. The proposed time limits would truncate strict liability in just those cases—long latent diseases—where proof of negligence is most difficult.
2. The liability only arises once products have been put into circulation and would therefore not apply to classes of victim who are often those most at risk such as the producers' own workforce, including experimental scientists.
3. The requirement of putting the product into commercial circulation may preclude many environmental disease cases such as the poisoning by industrial effluent of a nearby community.
4. Medical causation remains the barrier it is at common law, as does the requirement to identify the appropriate defendant.
5. Parallel issues of apportionability still remain.

(b) The rejection of preferential treatment: the 'needs' basis

Even if there were fewer difficulties with limited reforms, many reformers still find them objectionable because of the unattractive anomalies inevitably produced by any improved system of compensation (be it tort or non-tort) which is limited as to cause. The argument against preferential treatment between victims of fault and others, or between beneficiaries of limited non-tort schemes and others, is the relatively simple one that just distribution of resources requires equality of treatment based on need. In this context the availability of an identifiable tortfeasor (under a fault or strict liability regime) or the cause of the disability (under limited non-tort schemes) ceases to be relevant. Other subsidiary pragmatic arguments against preference such as the wastefulness of demarcation disputes are also advanced but the principal line of attack is the one of distributive justice. The attitude is exemplified by Atiyah. 'All the disabled are entitled to equal sympathy and equal support from the State and ad hoc treatment of special

16 On this point see J. Henderson 'The Boundary Problems of Enterprise Liability' 41 Maryland L Rev 659 (1982).
groups can only lead to the abandonment of all rationality in policy. This 'needs' philosophy has now become so widely accepted as the desirable principle in this field that it has almost become conventional for reformers to advocate a comprehensive Woodhouse-type solution or a National Disability Income to replace the patchy network of tort and non-tort sources of compensation. Moreover, it is probable that even the recent recession and conservative mood of government will not defuse (merely delay) this thrust for comprehensive reform. But how does all this translate in its application to disease victims?

The earlier part of this article outlined how arguments to reject fault, tort itself and ad hoc schemes in favour of a needs basis are even more powerful in the area of man-made diseases: proof of fault is more rarely possible than in accidents; in only a few classes of disease victim would the introduction of strict liability assist; and any liability or limited no-fault solution would still be hampered by risk definition and medical causation problems that would exclude most victims of man-made disease. Even in such politically favoured areas as work-related hazards, current schemes do not cover all occupational diseases nor all victims of scheduled diseases (for example those who live with asbestos workers and contract asbestos cancers). In short, man-made diseases are particularly effective in highlighting both the inequity of compensation schemes based on cause and their substantial unworkability in many cases. It would, therefore, seem logical that at least one touchstone by which any proposed reform based on needs should be judged would be how it treated these victims of man-made disease, paradigm examples of the failure of tort and limited non-tort schemes. More importantly, the replacement of fault with need as the criterion of compensation policy inevitably leads to the conclusion that all disease victims (including those due to, say, genetic factors) should also be given equal treatment.

Nonetheless, in the formulation of major reform proposals, preference is given to cases of disability caused by accident. The New Zealand compensation scheme, for example, covers personal injury by accident and excludes other sources of disability except (i) occupational diseases, (ii) unusual adverse drug reactions which fortuitously qualify under the medical misadventure provisions, and (iii)

21 The situation in the USA is acute: it is estimated that only one-third of deaths and one-thirteenth of disablements caused by work disease result in workers' compensation awards, Anon, 'Compensating Victims of Occupational Disease' 93 Harv L Rev 915, 925 (1980). In Canada the coverage of workers' compensation for occupational disease is so narrow in practice because of problems of medical causation that this, rather than the corresponding failure of tort to deliver compensation, is used by one commentator to argue for a comprehensive compensation system. P. Weiler, Protecting the Worker from Disability: Challenges for the Eighties (Report submitted to Russell Ramsay, Minister of Labour, April 1983) 10–11, 73.
deafness inexplicably included as 'personal injury by accident'.\textsuperscript{22} In Australia it was proposed that all personal injury would be covered but even here the proposals considered treating disability due to accidents with preference, at least in terms of speed of reform.\textsuperscript{23} Under the current proposals by the Australian Labor Government non-occupational disease victims no longer feature on the reform agenda at all.\textsuperscript{24} In other words, even reformers who adhere to a needs basis often find it necessary (usually on ostensibly pragmatic grounds) to draw a distinction between two classes of disabled. To digress for a moment: an interesting fact is that this line is drawn between injury by accident (portrayed as class 1 in Figure 1) and victims of non-traumatic illness (classes 2 and 3). Why is

\begin{figure}
\centering
\includegraphics[width=0.5\textwidth]{figure1.png}
\caption{Classes of disablement.}
\end{figure}

this so? If particular sympathy is felt for accident victims because somehow this is the price for living in a highly complex industrial society, then that applies equally well to the man-made diseases of class 2. Even tort law sought to give some people

\textsuperscript{22} Accident Compensation Act 1982 (NZ) (1982, No. 18) ss. 2, 28, 29. For commentary see Woodhouse New Zealand op cit paras, 17, 25(c); Woodhouse Australia op cit, paras 353(c), 325.

\textsuperscript{23} Woodhouse Australia, op cit, para 3.

\textsuperscript{24} The policy is to proceed by cooperation with the states, instituting in stages a uniform no-fault road accident scheme, increased workers' compensation benefits to match those under the road scheme, extension of workers' compensation to twenty-four-hour cover for accidents to earners and a final extension of accident compensation coverage to non-earners: A. Browne, 'Labor's Legal Package' \textit{18 Aust L. News} 9, 11 (1981). Non-occupational disease was not even included in the terms of reference of the inquiry which is seen as the pacesetter in this plan: New South Wales Law Reform Commission, \textit{Issues Paper: Accident Compensation} (NSWLRC, Sydney, 1982) para. 1.12.
disabled in this way a remedy. Of course one reason is the neglect of man-made diseases as a class by analysts of compensation law. But there is also an important practical reason why a distinction is not made on the basis of disability caused by man-made (classes 1 and 2) and ‘natural’ causes (class 3). It is the intractable problem of medical causation. It is known, for example, that 80 per cent of cancers are due to environmental (societal) factors, factors over which control can be exercised, but it is usually impossible to diagnose origin in individual cases. It is also known that death rates vary between regions because of the inadequacy of medical facilities—that over 20,000 deaths a year in England and Wales are avoidable by reasonably attainable levels of treatment—but again the attribution would be difficult, and no doubt controversial, in any particular case. Indeed most types of disease straddle the theoretical line with some (usually the minority of) cases being positively attributable to man-made causes and others for which this is not possible. To attempt to define a compensation system which includes classes 1 and 2 would simply be too costly to administer and raise too many controversial issues while exposing the reform to the cry of ‘anomaly’ as some, say, cancer victims received benefit while others did not. In contrast the line between classes 1 and 2 is relatively workable with problem areas concentrated on issues such as the ‘process’ distinction and medical treatment injuries. It is, therefore, for solid practical reasons, that a distinction within the illness category is not adopted. This leaves the question of why, despite the apparently broad acceptance of a needs basis for a reform, a line is drawn giving preference to the class of accident victims over the classes of disease victims.

THE ACCIDENT PREFERENCE

Reformers like Woodhouse have generally given no explicit detailed rationale for giving priority to traumatic injuries, except the pragmatic one of cost. An accident scheme would be much cheaper than a sickness scheme—Woodhouse estimated it at about one-quarter and since statistics on disease were sparse, the cost of the sickness scheme may have been even higher. Cost is a rational criterion by which reform priorities can be set. It makes sense that if all cannot be helped, those who can, should be. Moreover, this applies even if there is no prospect of a step by step extension to comprehensive coverage of all disability. The resultant entrenched anomalies are simply the price to be paid for doing what is feasible in alleviating hardship in a limited area. But the cost consideration does

26 Woodhouse New Zealand, op cit, paras 17, 290.
27 Woodhouse Australia, op cit, para. 483. Pearson Vol. 1, para. 1711, estimated extension of a road scheme to illness would cost £2000 million a year, an 80 per cent addition to total cost of social security and tort compensation.
not necessarily lead to this particular form of compromise. The fact of limited resources does not explain why the preferred first and perhaps only step of reform is to provide generous benefits to a select class of disabled. Arguably it might make better sense to start with low uniform benefits for all disabled increasing them across the board if and when resources allow. Cost alone, therefore, is not a sufficient justification for limiting the public compensation scheme to accidents. Pressure from vested interests also cannot be the answer. The income from disease litigation is insignificant to the legal profession. Moreover, insurers find health cover particularly difficult. In submissions to the Woodhouse Committee, the Australian insurance industry actually argued for the step-by-step proposal to be reversed with the detached sickness scheme being implemented first and (unlike the insurers’ proposal for the injury scheme) handed over to the government as insurer on the ground that the resources necessary for the sickness scheme were far beyond the capacity of the insurance industry.28 Ironically in rejecting this idea Woodhouse noted that it produced parallel systems differentiated on the basis of cause, a result to be rejected on principle. Of course this reasoning simply emphasizes the greater anomaly in the ‘accident scheme first’ option which would not have encompassed what Woodhouse himself saw as the ‘major field of compensation’, disability caused by means other than trauma.29

It seems that the accident preference is probably derived from the fact that in the past academic lawyers and other reformers, who have arrived at the idea of a ‘needs’ basis for compensation reform, have generally done so after an examination of tort as a compensation mechanism. Because tort liability is effectively confined to cases of traumatic injury the focus on tort produced a focus on accidents. Critics of tort were, therefore, misled by its poor performance in compensating accident victims into seeing a particularly ‘urgent need’30 to replace it with a public system of accident compensation while overlooking the fact that the absence of case-law on man-made disease suggests a greater need for reform in this area. The critical evaluation of tort was not taken far enough. Even if reform is primarily aimed not at the needs basis which is professed but at the substitution of a no-fault system in cases to which tort formally applied, then reform must also cover man-made diseases. In maintaining an accident preference at this stage reformers seem to have been guilty of one of their own major criticisms of the supporters of tort law: that in concentrating on those who get to court one ignores the majority who do not get full or any damages from the system because of its informal barriers and vagaries of operation. Critics have been eloquent in describing how the majority of accident victims are excluded in this way yet they have given scant attention to the greater number of victims of man-made disease

28 Woodhouse Australia, op cit, paras 15, 220, 224, 227–8, 297.
29 Woodhouse Australia, op cit, paras 15, 227–8.
who fail to obtain tort damages for the same sort of reasons. By ignoring
man-made disease as a class, personal injuries become roughly divisible into
accidents for which tort proved inadequate and should be replaced, and
non-traumatic disability arising from 'natural' causes which never gave rise to the
possibility of tort claims and which could, therefore, be ascribed secondary
priority in the pragmatic implementation of a compensation plan designed
ultimately to reflect a needs basis.

The most important result of this unrigorous thinking and its resultant
tort-derived accident preference is that it raises to an extraordinary degree the
baseline of benefits considered adequate under any new 'replacement' scheme. In
general reformers seek to provide what I will loosely call 'standard of living'
benefits to approximate as near as is feasible under an administrative
compensation scheme to the position in tort damages. The hallmarks of this
approach are the provisions of earnings-related benefits, payment throughout the
full period of incapacity and often some compensation for non-economic losses.31
The rationale is that it is only fair—or at least politically feasible—to replace the
existing regime if the new benefits approximate as closely as possible to the
expectations generated by the tort remedy (and by industrial compensation which
had, in being a substitute for tort in a limited area, broadly adopted a similarly
generous benchmark for benefits).32 This is argued even though it is admitted that
only a small minority of accident victims receive any tort damages under the
present regime (6.5 per cent).33

To reiterate the reasoning leading to the pronounced accident preference:
initially reformers concentrate on tort and this produces a concentration on
accidents. Tort is found inadequate as a compensation mechanism. To justify
abolition rather than reform of tort, a no-fault principle and 'needs' criterion of
reform is developed. Yet this is not rigorously applied when it comes to the design
of reform proposals. Instead the original focus on tort and, therefore, on accidents
reasserts itself producing an accident preference in reform proposals. Reform itself
is limited—accidents are to be dealt with first. Since the overwhelming number of
beneficiaries of the replaced regime were in practice accident victims, this
limitation of the new scheme's coverage to those disabled in this way can seem
less exceptional. Moreover, when the level of benefits is chosen, it is set to reflect
the idea of 'just' compensation developed under tort law (and its substitute,
industrial compensation). The perceived necessity of protecting the interests of
those accident victims with a remedy under the replaced regime provided a
convenient justification for the provision of generous 'standard of living' benefits
to the large class of accident victims who would not have had such a remedy. This

31 See, e.g. Woodhouse New Zealand, op cit, para. 4; Woodhouse Australia, op cit, paras 9, 257,
343-4, 365; Pearson, op cit, Vol. 1, paras 800, 1012.
32 Woodhouse New Zealand, op cit, paras 269, 280; Woodhouse Australia, op cit, paras 248, 343,
355, 475.
33 Pearson, op cit, Vol. 1, para. 78.
can then appear both a reasonable and generous rationalization of existing resources.

THE EFFECT OF INCLUDING DISEASE VICTIMS

If an examination of the accident preference and its origin reveals that accident compensation schemes provide generous 'standard of living' benefits because reformers see the reform here primarily in terms of a limited rationalization of existing compensation systems (systems which in practice focus almost exclusively on the misfortune of accidental personal injury) and not in terms of broad social policy as professed, then what are the results if broader principles are to be firmly applied? What would the effect be, for example, if the 'needs' basis of reform were to be given the centrality that is often claimed for it?

Earlier it was argued that it is typically the victim of man-made disease who is worst served by the regime of tort liability in practice. Even if the focus of reform is limited to the failure of tort, then coverage of man-made disease in any replacement scheme is essential. What is more, as described earlier, the distinction between man-made disease and sickness from other causes is not administratively feasible so that any scheme that seeks to cover the former must, by practical necessity, cover the latter regardless of whether the distinction is itself meaningful in scientific terms or desirable in policy terms. To cover man-made disease, then, one must abandon the natural/non-natural distinction between injury misfortunes. If the principle of reform is the broader social ideal of a needs basis, disease should be covered and there is not even a need to appeal to administrative feasibility to arrive at this conclusion. If need is the basis then the origin of the injury, accident or disease, is irrelevant.

If there is a commitment to a needs basis and to the inclusion of disease in any compensation scheme this has profound effects—it leads eventually to a questioning of the current artificial or at least unexplained differential in policy between personal injuries and other misfortunes. How is this so? It is clear that in a comprehensive compensation scheme which covers not only accidents but disease the vast majority of beneficiaries will not have been eligible for the generous benefits under the replaced tort/industrial compensation regime. Approximately 90 per cent of cases of incapacity are due to non-traumatic causes,34 yet recovery of tort or industrial compensation benefits by those disabled in this way is relatively rare. The consequence of including disease in a scheme, therefore, is that it will be much harder to justify treating personal injuries (whether described as 'natural' or 'non-natural') preferentially to other misfortunes on the basis that some beneficiaries had formally been entitled to generous 'standard of living' benefits. In a comprehensive scheme this group would be tiny (see Figure 2). Arguments based on the protection of their rights and the

34 Pearson, op cit, Vol. 1, para. 41; Vol. 2, para. 35.
characterization of the reform as a 'rationalization' of existing compensation schemes lose much of their force. It would become more arguable that the concerns of the very few are outweighed by the public benefit that abolition of their rights would produce. Once protection of these rights is abandoned as an integral aspect of reform, what should dictate the level of benefits which is 'just' compensation for personal injuries? An explanation as to why, if at all, the misfortune of personal injury should be treated in terms of benefits preferentially compared with other misfortunes is then called for.\(^3\) Of course such a system may

\[ \text{Figure 2. Contributions to disablement: (1) Accident Victims... 10 per cent (Pearson, Vol. 2, para. 35). (2) Accident Victims who receive some compensation... 5.5 per cent (Pearson, Vol. 2, para. 50). (3) Accident Victims who receive tort damages... 0.7 per cent (Pearson, Vol. 2, para. 74).} \]

be funded on an insurance basis with higher benefits going to those who have made higher contributions. But this simply reformulates the question: why should society be so solicitous of the plight of these personal injury victims that it constructs a compulsory insurance scheme to protect the individual's earlier standard of living while not providing the same type of insurance protection to, say, the victims of involuntary unemployment? Why should a victim of personal injury receive earnings-related benefits from the State scheme and the victim of unemployment or a dependent wife who has been deserted get far more modest support? This is the broadest contribution to the reform debate which a focus on and commitment to disease compensation makes: it exposes the need for an evaluation of social welfare priorities across a much wider spectrum of misfortune than simply personal injuries. It also highlights how the continuance of the limited

\(^3\) The bias of the comparable preference towards the misfortune of medical disability which exists in social welfare systems has also been queried: L. Liebman 'The Definition of Disability in Social Security and Supplemental Security Income' 89 Harv L Rev 833, 843 (1976).
accident focus of reform distorts and disguises these issues to the detriment of rational policy-making.

RAMIFICATIONS OF THE ACCIDENT PREFERENCE WITHIN THE COMPENSATION DEBATE

Assume that some rationale can be found to support a separate public system of compensation for personal injury and that the needs basis is genuinely adopted so that no distinction in reform priorities is to be made on the grounds of how injury has occurred. From this starting-point it is easier to see the distortions in the compensation debate caused by the current focus on accidents and its resultant tort-derived idea of what the benchmark of just compensation should be in any reform proposals.

(a) Preclusion of ultimate comprehensive goal

The most obvious problem with a tort-derived concept of 'just' compensation is that its costliness may preclude the ultimate comprehensive goal. The reform may be halted at the accident stage, as seems to have been the case in New Zealand. Indeed the current vogue elsewhere for step-by-step reform—typically with a first step of a no-fault road accident scheme—may in fact be halted after the first step and not even reach all accidents let alone disease. This is because apart from work injury (already served by a no-fault scheme) road accidents are the major area where tort liability was sufficiently real in practice to precipitate compulsory insurance. Ironically the pattern of effective tort liability seems to guide and limit the extent of feasible reform because these pools of insurance money may readily and politically painlessly be converted to fund a state-run no-fault road scheme.37

But once these are used to finance the first step of reform there may be a lack of the political will necessary to raise or divert from other public programmes the additional funds necessary to cover comparable benefits for the remaining victims of accident and for disease victims, even though these form the vast majority of the disabled. In other words, there may be a fundamental policy choice unwittingly being made here. In 'selling' the idea of no-fault compensation by the almost magical creation out of existing funds of such generous benefits for the 75 per cent of road accident victims who would have received nothing under the


37 G. Palmer describes how the exploitation and rationalization of existing funds was a basic Woodhouse strategy, 'Compensation for Personal Injury: A Requiem for the Common Law in New Zealand' 21 Am J Comp Law 1, 25, 30 (1973). R. Gaskins notes how the focus on existing funding arrangements inhibited extension to non-auto injuries to non-earners in New Zealand, 'Tort Reform in the Welfare State: The New Zealand Accident Compensation Act' 18 Osgoode Hall LJ 238, 271 (1980).
former tort/industrial compensation regime, reformers may in fact be choosing the goal of rationalizing at a generous level existing compensation funds within a limited area at the price of abandoning the espoused ultimate goal of comprehensive cover of all disability. Of course, as disease is typically left to the last stage of step-by-step strategies it is likely to be the first area precluded by a reform truncated by lack of funds. It may be that there is an implicit preference for short term rationalization of compensation funds within a limited area of disability. There may even be a different attitude to the compensation of traumatic injury itself—despite the vigour with which reformers reject such causal distinctions. But in either case these policies ought to be spelt out if only to dispel false hopes of ultimate comprehensive cover.

The goals of short term rationalization at generous benefit levels and ultimate comprehensive cover may not be mutually exclusive. It has been argued that the more generous benefits in the limited first step—such as those for accidents in New Zealand—can serve as positive pace-setters for other areas, even for social welfare benefits in general. The problem is that without an explicit and well-thought-out basis this flow-on effect may occur in areas where it was unintended. Alternatively, as noted earlier, financial constraints may block the flow-on to intended areas, creating unintended entrenched anomalies. In either case the potential for the distortion of social welfare policy by an ill-thought-out 'pace-setter' strategy is high.

If, on the other hand, there is a trade off between short term rationalization within a limited area of disability compensation and the comprehensive goal, an interesting possibility arises which turns conventional reform wisdom on its head. This is that a firm commitment to the comprehensive goal may require any step-by-step strategy for reform to employ a first step which covers disease rather than accidents. It is in the accident area that organized vested interests are strongest. In many jurisdictions, for example, workers' compensation provides earnings-related compensation for at least the first twenty-six weeks. Since approximately 95 per cent of accidental injuries recover within this period, reform proposals which provide benefits at a lower level have been vigorously debated.

38 Pearson, op cit, Vol. 1; Table 5, p 24; para. 994.
39 See, e.g. D. Elliott and H. Street, Road Accidents (Penguin, London, 1968) 250: 'It is a fact that the concern of society about the traffic victim is of a different order from its anxiety about the cancer victim'; although arguably this may be attributable to existing patterns of effective tort liability and is not necessarily a suitable criterion for a post-tort regime, see S. Lloyd-Bostock 'Common Sense Morality and Accident Compensation' [1980] 32 331, 336, 344.
40 This is the beneficial 'legacy of the common law' forecast by Palmer Compensation for Personal Injury: A Requiem for the Common Law op cit. 3. See generally G. Palmer Compensation for Incapacity (OUP, Wellington, 1979) Chap. 19 and Gaskins, op cit.
41 This seems to have occurred in New Zealand with flow-on effects in income maintenance areas such as pensions, A. Ogus, P. Corfield and D. Harris 'Pearson: Principled Reform or Political Compromise?' 7 Indust LJ 143, 149 (1978). T. Ison also notes the case of home alterations, Accident Compensation (Croom Helm, London, 1980) 22.
42 Woodhouse Australia, op cit, para. 399.
resisted by organized labour in those jurisdictions. Abandonment of the earnings-related principle in a first-step accident scheme would, therefore, hardly seem viable politically. Strangely then, the comprehensive goal may best be served by a step-by-step strategy installing benefits at less generous levels (say along the lines of the British industrial injuries scheme) beginning with non-traumatic injuries. Since the vast majority of this class has no effective claim under tort or industrial compensation, the ‘abolition of rights’ argument would be defused while the associated phenomenon of lack of vested interests would assist the reform. Moreover, being the most costly, a first stage covering disease may be a better test of basic political commitment to the comprehensive goal. In the longer term the anomalous preferential treatment of disease victims might then generate pressure for extension to all accidents and undermine the arguments of the privileged section of the accident class (tort and industrial compensation beneficiaries).

(b) Trade-off between wealth distribution and deterrence goals

Another problem with the tort-derived idea that ‘just’ compensation ought to protect an individual’s standard of living is that the administrative practicalities of funding may require a choice to be made between policies of wealth distribution and deterrence. Unlike flat-rate benefits, a system of ‘standard of living’ benefits does not preferentially assist the poor, and in fact unless funding of a compensation scheme is carefully structured redistribution in the opposite direction will occur. If no distribution in either direction is desired then a beneficiary with a previously high standard of living should have been contributing proportionately more to the fund. This could be done by variable direct contributions. It might also arguably be achieved in a crude way if funding was drawn from income tax revenue. If, however, funding comes directly from levies on activities seen to contribute to personal injuries in an attempt to channel and optimize the deterrent effects of the scheme then redistributive effects towards the higher earner will be considerable.

This problem arises even in limited schemes. For example, a road scheme funded by a flat petrol tax but providing standard of living benefits will be regressive, that is, the poor will draw proportionately less from the scheme for what they contribute. Similarly, variable funding by industry for disability caused by industrial or product-related risks will also be regressive under such a system of

43 Palmer Compensation for Incapacity, op cit, 327 but cf. Atiyah, op cit, 199. Conversely a flat-rate benefit from general taxation redistributes to the poor which some may find problematic, e.g. J. Keefer ‘Report of the National Committee of Inquiry into Compensation and Rehabilitation in Australia’ 5 Adelaide L Rev 121, 129 (1973–6).

benefits.\textsuperscript{45} Theoretically it seems possible to combine variable rates from injurers (more correctly 'best cost averagers') reflecting deterrence goals and variable rates from beneficiaries of the standard of living benefits so that each 'pays his way'.\textsuperscript{46} In practice this may be administratively impossible, producing a funding dilemma which can only be resolved by compromising or even the complete abandonment of either the deterrence or insurance principle. The most popular solution adopted by reformers who desire standard of living benefits seems to be to abandon the insurance principle with consequent regressive effects.\textsuperscript{47} This does not seem attributable to any well-thought-out rationale such as priority being given to deterrence since, typically, of the machinery available to optimize deterrence via funding, that which is adopted, is exceedingly crude.

(c) The problem of non-economic losses

A third difficulty with a tort-derived notion of just compensation is that it often encompasses payment for non-economic losses. Were a compensation system simply designed to replace an earner's loss of earnings assessment problems would be relatively manageable. However, since such a scheme would completely exclude non-earners (a majority of the population)\textsuperscript{48} and since such a scheme does not compensate earners for partial disabilities which have no impact on earning capacity (such as deafness in one ear or reproductive injury), it is thought correct and in keeping with the tort notion of compensation to incorporate compensation for non-economic losses.\textsuperscript{49} The problem with this aim, however, is that it is not administratively feasible to provide the sort of individual assessment attempted under tort, nor has there been developed a workable formula which compensates non-economic losses in an equitable manner.\textsuperscript{50} More broadly, the compensation of non-economic losses produces particularly distasteful anomalies in limited schemes for personal injuries such as that in New Zealand where, for

\textsuperscript{45} These effects currently take place in the tort/liability insurance system—see Atiyah, op cit, 200–1, 537; Palmer, \textit{Compensation for Incapacity}, op cit, 327; Ogus et al., op cit, 157.

\textsuperscript{46} F. Well suggests both sources: op cit, 137.

\textsuperscript{47} Earlier Australasian reformers showed alarming confusion on the point, repeatedly referring to the goal of social insurance (with earnings-related benefits) yet approving funding mechanisms which did not reflect this goal: Woodhouse NZ, op cit, paras 4, 243, 279, 290, 314; Woodhouse Australia, op cit, paras 243, 344, 493.

\textsuperscript{48} Where the unemployment rate is 5.6 per cent, 57 per cent of population are non-earners: NSWLRWC Working Paper 1, para. 7.2. A bias against non-earners is particularly important to disease victims since episodes of sickness are concentrated among the very young and very old, relatively more of whom are non-earners: Woodhouse Australia, op cit, para. 485.

\textsuperscript{49} Despite apparent distaste (Keeler, op cit, 125; Palmer, \textit{Compensation for Incapacity}, op cit, 221) Woodhouse accepted that there should be compensation for non-economic loss: Woodhouse NZ, op cit, paras 60, 198; Woodhouse Australia, op cit, paras 565, 373. Compare minority opinion in Pearson, op cit, Vol. 1, paras 457–64.

example, a person may be able to receive compensation for the disappointment felt by a disability barring a previous hobby while a non-occupational cancer victim receives nothing at all from the scheme. Even in a comprehensive scheme demarcation problems are raised: if the fund is to compensate for non-economic losses due to physical condition per se, does this mean that, say, the infertile would qualify for benefit? When, if ever, do physical problems such as speech impediments and physical unattractiveness qualify, and why? Compensation for the non-economic losses associated with physical condition may also seem anomalous when it is remembered that personal injury and disease victims would already be preferentially treated by generous benefits for economic loss. Why compensate the pain and suffering of deafness but not the real economic loss, let alone pain and suffering, of unemployment? Again the point can be made that the inclusion of disease within reform proposals would drastically weaken the appeal of tort as a guide to just compensation. In this specific context it would challenge the provision of non-economic losses in a public system of compensation for misfortune. Why should the system provide for non-economic losses when the vast majority of disabled would not have had a claim for such benefits under existing regimes?

THE WIDER RANGE OF COMPENSATION REFORM OPTIONS

In the preceding section some of the problems associated with an inflexible adoption of a tort-derived notion of adequate personal injury compensation were discussed. Earlier it was argued that a determination to include disease within a compensation scheme severely undermines the argument for tort as such a guideline. Such a determination would, therefore, seem to open up the reform debate to include a range of options often currently dismissed as inadequate in terms of a reform seen as a replacement for tort, options which might reduce or avoid the problems encountered in the tort idea of protecting an individual's standard and quality of life. These options might include, for example, a primary focus on alleviation of interruption of income51 and this might in turn support the abandonment of the distinction between personal injuries and other misfortunes. Alternatively, if some basis for a preference for personal injuries is found, then a compensation scheme might be based on incapacity rather than simple income

loss. The comprehensive goal itself may be abandoned or postponed as in certain options described earlier such as the first-step coverage of disease only. An opting-in scheme somewhat along the lines suggested by O'Connell might be used. The public fund could offer a certain level of benefit (flat or earnings-related) in return for any claim in tort held by the victim, and in turn the fund could offer tortfeasors settlement at a level considerably lower than tort damages. A third non-comprehensive scenario is the construction of separate schemes for specific needs, for example medical costs, wage loss, out-of-pocket expenses and non-economic losses. The point to make is that once reform is genuinely seen as needs based, once it is seen more as a social welfare development than narrowly as a replacement of tort, even issues as well-accepted as comprehensive cover are open for reassessment. Until such fundamental issues are re-evaluated and some consensus on them reached, not much will be gained from formulating detailed designs for compensation schemes.

SUMMARY AND CONCLUSION

In the debate over compensation for personal injury the issues raised by man-made disease have been neglected even though the pressures created by them have both changed the shape of the general law such as statutes of limitation and severely strained conventional theories such as the all-or-nothing balance of probability test in factual causation. Even if concern is now focused on these issues the capacity of the tort system to adjust or be reformed to accommodate claims by those disabled by disease is severely limited, principally because the characteristics of such cases—gradual contraction and latency of symptoms—render causal identification of a tortfeasor and proof of fault nearly always impossible. The latter problem might to some extent be overcome by forms of stricter liability but neither these reforms nor non-tort compensation schemes

52 E.g. Woodhouse Australia, op cit, paras 390–400, used a flat-rate incapacity-based formula for permanent partial disability. Other proponents of a uniform disability benefit are cited by R. Lewis, 'No-Fault Compensation for Victims of Road Accidents: Can it be Justified?' 10 J Pol Sci 161, 163 n 7 (1981). The most important existing model is the flat-rate industrial disablement benefit available under the Industrial Injuries Scheme, regardless of income loss. (Although some earnings-related supplement, the special hardship allowance, was incorporated from the start: Atiyah, op cit, 397; Pearson, op cit, Vol. 1, para. 101.)

53 This may provide a way around the doubtful constitutionality of a federal compensation system in Australia where abolition of the tort remedy has been thought beyond Commonwealth power, see Parliament of the Commonwealth of Australia Report from the Senate Standing Committee on Constitutional & Legal Affairs: Clauses of the National Compensation Bill, 1974 (1975, Parl. Paper No. 142) para. 3.4. Compare J. O'Connell 'Harnessing the Lawsuit Lottery: Elective No-Fault Insurance' [1978] Wash. ULQ 693.

54 Leading the House of Lords, for example, to depart from that text in the striking decision of McGhee v National Coal Board [1973] 1 WLR 1 (an industrial dermatitis case).
limited on the basis of cause can overcome the former barrier to the recovery of compensation.

The conventional reform wisdom is that tort ought to be abandoned in favour of a comprehensive form of public compensation for personal injuries. But although the stated rationale is the equal needs of the disabled, and although a majority of these are disease victims, a distinct preference for accident victims emerges in actual reform proposals. This seems to be a remnant of the bias of effective tort liability towards trauma, and is far less convincing if there is a true commitment to encompass all disabled on the basis of need rather than the commitment being simply a rationalization of existing compensation systems. If comprehensive cover is in fact the ultimate concern of reformers, tort-derived ideas of just compensation should not continue to overshadow, limit and distort the suggestions for personal injury compensation reform because the vast bulk of beneficiaries would not have had a remedy under the former regime. This has two principal implications. First, it highlights the need to justify or else abandon the preference in reform proposals for the victims of personal injury over the victims of other misfortunes. Secondly, it opens up a wide variety of options for the pattern and level of benefits for compensation. A commitment to compensate all disability will, therefore, require a fundamental reassessment of what the ultimate goals are in this field. It may be, for example, that the ideal of comprehensive cover is itself unworkable, or that preferential treatment of certain classes of victim, disability or loss is, in fact, more desirable from a practical and policy point of view. What is clear is that, contrary to the prevailing wisdom of reformers, a comprehensive scheme based on a generous level of benefits is not the goal to which logic and policy inexorably point. Basically, the lesson which attention to disease teaches is that the compensation debate is fundamentally and disturbingly far more complex than generally acknowledged.