Hilary Term
[2011] UKSC 17
On appeal from: [2009] EWCA Civ 499

JUDGMENT

Baker (Respondent) *v* Quantum Clothing Group Limited (Appellants) and others

Baker (Respondent) *v* Quantum Clothing Group Limited and others (Pretty Polly Limited) (Appellant)

Baker (Respondent) *v* Quantum Clothing Group Limited and others (Meridian Limited) (Appellants)

before

Lord Mance
Lord Kerr
Lord Clarke
Lord Dyson
Lord Saville

JUDGMENT GIVEN ON

13 April 2011

Heard on 22, 23 and 24 November 2010

Appellant
Michael Beloff QC
Dominic Nolan QC
Simon Beard
(Instructed by
Weightmans LLP)

Respondent
John Hendy QC
Theodore Huckle
Robert O'Leary
(Instructed by Wake Smith
& Tofields)

Appellant
Patrick Limb QC
Toby Stewart

(Instructed by Berrymans
Lace Mawer LLP)

Respondent
John Hendy QC
Theodore Huckle
Robert O'Leary
(Instructed by Wake Smith
& Tofields)

Appellant
Christopher Purchas QC
Catherine Foster
Nadia Whittaker
(Instructed by Hill
Hofstetter LLP)

Respondent
John Hendy QC
Theodore Huckle
Robert O'Leary
(Instructed by Wake Smith
& Tofields)

*Intervener (Guy Warwick
Limited)*
Michael Kent QC
A John Williams
(Instructed by Keoghs
LLP)

LORD MANCE

Introduction

1. This appeal concerns the liability of employers in the knitting industry of Derbyshire and Nottingham for hearing loss shown by employees to have been suffered during the years prior to 1 January 1990, the date when the Noise at Work Regulations 1989 (SI 1989/1790) came into force. The central issue is whether liability exists at common law and/or under section 29(1) of the Factories Act 1961, towards an employee who can establish noise-induced hearing loss resulting from exposure to noise levels between 85 and 90dB(A)lepd.

2. Noise is generated by pressure levels in the air. The loudness of a noise depends on the sound pressure level of the energy producing it, measured in decibels (dB). The decibel scale is logarithmic, so that each 3dB increase involves a doubling of the sound energy, even though a hearer will not actually perceive a doubled sound pressure as involving much, if any, increase in sound. Noise is rarely pure, it usually consists of a "broadband" combination of sounds at different frequencies, and the human ear is more sensitive to noise at some (particularly middle) frequencies than at others. The sound pressure level across a range of frequencies is in a general industrial context commonly expressed by a weighted measurement described as dB(A). Apart from very loud, immediately damaging noise, with which this case is not concerned, damage to the human ear by noise exposure depends upon both the sound pressure level from time to time and the length of exposure, as well the individual susceptibility of the particular individual. Sound pressure level averaged over a period is described as dB(A)leq. Exposure at a given dB(A)leq for 8 hours is described as dB(A)lepd. Exposure at a given dB(A)lepd for a year gives a Noise Immission Level (NIL), which will build up slowly with further years exposure.

3. Sound is perceived by the hearer as a result of the conversion by the ear drum of the sound pressure variations in the air into mechanical vibrations. These are conveyed by the middle ear to the cochlea, which, by a process of analysis and amplification, translates these vibrations into nerve impulses which are then transmitted to the brain's auditory nerve. Hair cells in the cochlea play a vital part in the process, and noise-induced hearing loss (described as sensorineural) is the result of damage to such hair cells resulting from exposure to noise over time. Other causes of hearing loss include decline in the conductive function of the outer and/or inner ear, due for example to disease, infection, excess wax or very loud traumatic noise, as well as loss due to simple ageing (presbyacusis). Hearing loss

is commonly measured by ascertaining the average threshold below which hearing is affected and comparing it with a normal threshold. Both the rate at which any individual will suffer ageing loss and the susceptibility of any individual to damage as a result of noise exposure are, as between different individuals, very variable as well as unpredictable. Statistics, produced as will appear in the 1970s, do no more than attempt to indicate what percentage of a particular population may be predicted to suffer a particular level of hearing loss by a particular time in their lives by these different causes depending upon their circumstances.

4. In 1971 a Code of Practice was prepared by the Industrial Health Advisory Committee's Sub-Committee on Noise, and in 1972 it was published by the Department of Employment "as a blueprint for action". This Code remained in issue at the material times thereafter, and it said that a level of 90dB(A) should not be exceeded "[i]f exposure is continued for eight hours in any one day, and is to a reasonably steady sound" (para 4.3.1).

5. On 14 February 2007, His Honour Judge Inglis decided test cases, involving seven claims against four different companies: Taymil Ltd (successors to the liabilities of several employing companies and now known as Quantum Clothing Group Ltd), Meridian Ltd, Pretty Polly Ltd and Guy Warwick Ltd. The cases were all brought on the basis that there had been exposure to noise levels between 80 and 90dB(A)lepd.

6. Mrs Baker's claim was against Taymil. She had worked in Simpson Wright & Lowe's factory in Huthwaite Road, Sutton in Ashfield from 1971 (when she was 15) to 2001. The judge found that for 18 years, from 1971 to 1989, she "is likely to have been exposed to a noise level that attained 85dB(A)lepd, but did not at any time substantially exceed that level by more than 1db" (para 182). He also found that some other condition was affecting her left ear, but that her "years of exposure at or slightly above 85dB(A)lepd" had led to her sustaining a degree of noise-induced hearing loss and had played a small part in her suffering tinnitus. But Mrs Baker's claim failed on the ground that her employers had not committed any breach of common law or statutory duty. Had liability been established, the judge would have awarded her £5,000 for "this slight hearing loss and slight contribution to the tinnitus" (paras 192-193).

7. All the other employees' claims failed. In none of their cases was any noise-induced hearing loss shown to have occurred due to the relevant employment. Only for a few months in the 1960s in the case of Mrs Moss claiming against Taymil and for about two years (1985-1986) in the case of Mrs Grabowski claiming against Pretty Polly was there shown to have been any exposure to noise levels of or over 85dB(A)lepd in the relevant defendants' employment. However, in the case of Meridian (employers of Mr Parkes and Mrs Baxter and a subsidiary

of Courtaulds plc) and Pretty Polly (employers of Mrs Grabowski and a subsidiary of Thomas Tilling Ltd until 1982 and of BTR plc until 1994) the judge would have held liability to exist from the beginning of 1985, had noise-induced hearing loss been shown to have been incurred due to exposure to noise exceeding 85dB(A) in such defendants' employment.

8. Mrs Baker appealed to the Court of Appeal as against Quantum, and Meridian and Pretty Polly were joined to enable issue to be taken with certain of the judge's conclusions potentially affecting other claims. Guy Warwick was a respondent to an appeal brought only on costs. The Court of Appeal (Sedley, Smith and Jacob LJJ) allowed Mrs Baker's appeal on 22 May 2009, and reached conclusions less favourable to all four employers than those arrived at by the judge. The present appeal is brought by Quantum, Meridian and Pretty Polly, with Guy Warwick intervening by permission of the Supreme Court given on 30 June 2010.

9. The test of an employer's liability for common law negligence is common ground. In *Stokes v Guest, Keen and Nettlefold (Bolts and Nuts) Ltd* [1968] 1 WLR 1776, 1783, Swanwick J described the position as follows:

> "From these authorities I deduce the principles, that the overall test is still the conduct of the reasonable and prudent employer, taking positive thought for the safety of his workers in the light of what he knows or ought to know; where there is a recognised and general practice which has been followed for a substantial period in similar circumstances without mishap, he is entitled to follow it, unless in the light of common sense or newer knowledge it is clearly bad; but, where there is developing knowledge, he must keep reasonably abreast of it and not be too slow to apply it; and where he has in fact greater than average knowledge of the risks, he may be thereby obliged to take more than the average or standard precautions. He must weigh up the risk in terms of the likelihood· of injury occurring and the potential consequences if it does; and he must balance against this the probable effectiveness of the precautions that can be taken to meet it and the expense and inconvenience they involve. If he is found to have fallen below the standard to be properly expected of a reasonable and prudent employer in these respects, he is negligent."

10. Mustill J adopted and developed this statement in another well-known judgment in *Thompson v Smiths Shiprepairers (North Shields) Ltd* [1984] QB 405, when he said (at pp 415F-416C):

> "I shall direct myself in accordance with this succinct and helpful statement of the law, and will make only one additional comment. In the passage just cited, Swanwick J drew a distinction between a recognised practice followed without mishap, and one which in the light of common sense or increased knowledge is clearly bad. The distinction is indeed valid and sufficient for many cases. The two categories are not, however, exhaustive: as the present actions demonstrate. The practice of leaving employees unprotected against excessive noise had never been followed 'without mishap.' Yet even the plaintiffs have not suggested that it was 'clearly bad,' in the sense of creating a potential liability in negligence, at any time before the mid-1930s. Between the two extremes is a type of risk which is regarded at any given time (although not necessarily later) as an inescapable feature of the industry. The employer is not liable for the consequences of such risks, although subsequent changes in social awareness, or improvements in knowledge and technology, may transfer the risk into the category of those against which the employer can and should take care. It is unnecessary, and perhaps impossible, to give a comprehensive formula for identifying the line between the acceptable and the unacceptable. Nevertheless, the line does exist, and was clearly recognised in *Morris v West Hartlepool Steam Navigation Co Ltd* [1956] AC 552. The speeches in that case show, not that one employer is exonerated simply by proving that other employers are just as negligent, but that the standard of what is negligent is influenced, although not decisively, by the practice in the industry as a whole. In my judgment, this principle applies not only where the breach of duty is said to consist of a failure to take precautions known to be available as a means of combating a known danger, but also where the omission involves an absence of initiative in seeking out knowledge of facts which are not in themselves obvious. The employer must keep up to date, but the court must be slow to blame him for not ploughing a lone furrow."

An employer following generally accepted practice will not therefore necessarily be liable for common law negligence, even if the practice involves an identifiable risk of leading to noise-induced hearing loss. There is, as Hale LJ also said succinctly in *Doherty v Rugby Joinery (UK) Ltd* [2004] EWCA Civ 147; [2004] ICR 1272, para 44, "a distinction between holding that a reasonable employer should have been aware of the risks and holding that certain steps should have been taken to meet that risk".

11. Section 29 of the Factories Act 1961 provides:

> "(1) There shall, so far as is reasonably practicable, be provided and maintained safe means of access to every place at which any person has at any time to work, and every such place shall, so far as is reasonably practicable, be made and kept safe for any person working there. "
>
> (2) Where any person has to work at a place from which he will be liable to fall a distance more than six feet six inches, then, unless the place is one which affords secure foothold and, where necessary, secure hand-hold, means shall be provided, so far as is reasonably practicable, by fencing or otherwise, for ensuring his safety."

The judgments below

12. In his clear and comprehensive judgment, His Honour Judge Inglis followed the authority of *Taylor v Fazakerley Engineering Co* (Rose J, 26 May 1989) in concluding that the standard of safety required under section 29(1) "is governed by the general standard which ought reasonably to have been adopted by employers at the relevant time", and therefore that the section did not add materially to the common law duty in that respect (para 99). He held (para 87), in the light of the Code of Practice 1972 and extensive oral evidence called before him, that neither Taymil nor Guy Warwick as reasonable and prudent employers could be said to have been in breach of duty at common law or under section 29(1) "during the 1970s and 1980s, certainly until the time when the terms of [European Economic Community Directive 86/188/EEC of 12 May 1986] became generally known in the consultative document". The consultative document in question was "Prevention of damage to hearing from noise at work, Draft proposals for Regulations and Guidance", issued by the Health and Safety Commission in 1987. The document invited comments by 30 June 1988 and led to the Noise at Work Regulations 1989 (SI 1989/1790) which took effect from 1 January 1990. In the case of Meridian and Pretty Polly, the judge held that they had a greater understanding of the risks of noise by the beginning of 1983, that this required them to put in place a conservation programme accompanied by information and instruction, and that they were potentially liable from the beginning of 1985. The judge thus allowed a two-year period for action from the date when there was or should have been appreciation that action was necessary. However, it is in issue whether, in the case of Taymil and Guy Warwick, he was treating the two-year period as expiring at some undefined time during 1989 or as expiring on 1 January 1990, the same date as the 1989 Regulations came into force.

13. In the Court of Appeal, the main judgment was given by Smith LJ, with whom the two other members of the court agreed. Sedley LJ gave some short additional concurring reasons. The court differed from the judge. It held section 29

of the Factories Act 1961 to involve a more stringent liability than liability for negligence at common law, and it held further that, were it material, it would have concluded that liability for negligence at common law arose at earlier dates than the judge had adopted. With regard to section 29, Smith LJ concluded that the court was bound by the previous authority of *Larner v British Steel* [1993] ICR 551, with which she anyway agreed, to hold that whether a place was safe involved "applying [an] objective test without reference to reasonable foresight" and that "what is objectively safe cannot change with time" (paras 77 and 78). In the alternative, if foresight was relevant, she would have held that "by the early 1970s, any employer who kept abreast of developing knowledge would have known that prolonged exposure to 85dB(A)lepd was harmful to some people", making the workplace unsafe for an undefined section of his workforce, and, so, that he must do what was reasonably practicable to make and keep it safe. She concluded that - having regard to "a method available" in a British Standard BS 5330 published in July 1976 "which could be used by anyone with a modest degree of mathematical skill" – the position was that "by late 1976 or early 1977, the average-sized employer in the knitting industry could and should have been able to make an informed assessment of the quantum of risk arising from the below 90dB(A)lepd noise in his workshops". She then allowed, instead of the judge's two-year period, "about six to nine months for the provision of ear protectors once the decision had been taken that they should be provided" and, for the sake of simplicity fixed the date, by which action should have been taken and as from which liability arose under section 29(1), as January 1978 (paras 101-102). On this basis, Mrs Baker was awarded, for breach of statutory duty, 66.67% of £5,000 in respect of the 12 years of noise exposure which she suffered from January 1978.

14. With regard to the common law claim, Smith LJ concluded that HHJ Inglis's holding in para 87 of his judgment (para 16 below) "cannot be faulted", and upheld "his view that there was no breach of the duty at common law during the period for which a responsible body of opinion regarded it as 'acceptable' to expose employees to noise in the 85-89dB(A)lepd range" (para 105). While indicating her personal inclination towards an earlier date (based on the publication in 1982 by the European Commission of a first draft directive, later withdrawn), she also agreed with the judge's conclusion that "for the employer with the ordinary, or average degree of knowledge", that period came to an end in 1987, following publication of the second draft Directive" (para 105). In this connection, she again held that to allow longer than six to nine months was over-generous, and so fixed the date of any breach of common law duty by the "average" employer at January 1988 (para 106). She agreed that Meridian and Pretty Polly should have known by early 1983 "which of their workers required protection" and should within six to nine months thereafter have provided such protection (paras 107-108); and she regarded it as irrational to treat Quantum any differently, merely because it was part of a smaller group and operated as an individual company without the benefit of the central advice on health and safety issues enjoyed by the Courtaulds group and Pretty Polly. So Quantum would, in

the Court of Appeal's view, have been liable at common law, like Meridian and Pretty Polly, from late 1983 (para 109).

The history

15. The judge set out in paras 29 to 45 the history of investigation and awareness regarding the risks of occupational exposure to noise from the early 1960s to date. The Court of Appeal helpfully summarised the historical background in terms which I quote, interposing a number of observations of my own.

> "*Historical Background*
>
> 2. For well over a hundred years, it has been known that prolonged exposure to loud noise causes deafness. Such deafness was long regarded as an unavoidable occupational hazard. In the early 20th century, ear protectors were developed and were supplied to some members of the armed forces during both world wars. But it was not until the second half of the century that any real interest was taken in preventing noise-induced deafness in industrial workers.
>
> 3. In April 1960, the government of the day instructed Sir Richard Wilson to chair a committee to report on the problems of noise. The committee's first report was published in 1963. In the same year, in reliance on that report, a Ministry of Labour publication entitled 'Noise and the Worker' drew the attention of employers to the need to protect their workers from excessive noise. At that time, scientific knowledge was not such that it could be said with confidence at what noise level harm was likely to occur. A rough guide was given that workers who were regularly exposed to noise of 85 decibels (dB) at any frequency for eight hours a day should be protected."

I interpose that the author of the report was in fact Sir Alan Wilson FRS. An interim report was published in March and the final report in July. "Noise and the Worker" was published in the light of the interim report.

> "4. Further research was carried out during the 1960s, in particular by a team led by Professor W Burns, Professor of Physiology at the University of London and Dr D W Robinson, then head of the acoustics section of the National Physical Laboratory. In 1970, the result of their work was published as 'Hearing and Noise in Industry'.

> By that time, a method had been developed of measuring noise levels by reference to the weighted average for all frequencies (expressed as dB(A)) and for assessing the equivalent noise exposure over an eight hour working day (expressed as dB(A)leq or more recently dB(A)lepd). Burns and Robinson explained that they were now in a position to predict the degree of risk of hearing loss to groups of an exposed population of varying susceptibility from various levels of noise exposure. Their work would make it possible to prepare a code of practice for employers. They discussed the possibility of establishing a limit of maximum exposure as follows:
>
> > ‘The limit can be set at a variety of levels according to the ultimate risk judged to be acceptable and we suggest that it should not be set higher than 90dB(A) for normal continuous daily exposure which is likely to persist for many years.’
>
> 5. In 1968 and 1971 two further editions of 'Noise and the Worker' were published. The gist of the advice given in the third edition was that, if employees were exposed to noise in excess of 90dB(A), there should be a programme of noise reduction or hearing conservation. That level of noise exposure corresponded approximately to the 85dB which had been the level at which action was recommended in the first edition of 'Noise and the Worker'. The third edition encouraged employers to reduce noise exposure below the maximum permitted level in order to avoid risk to the hearing of 'the minority of people who are exceptionally susceptible to hearing damage”.

The guidance given in the third edition to “help to protect most people against serious hearing loss” was that they should not be exposed to levels of noise exceeding maximum sound levels specified in table 1 by reference to duration of exposure. In the case of an exposure duration of eight hours a day (the longest covered), the maximum sound level specified was 90dB(A). The encouragement given to reduce noise exposure below the maximum was to reduce noise exposure “if possible” and was expressed to be in order to avoid risk to the hearing of “the minority of people who are exceptionally susceptible to hearing damage, and for reasons of general welfare”. In the foreword to impressions published after April 1972, two of them by 1976, the third edition also said: “This booklet has been overtaken by the publication in April 1972 of the Code of Practice …. However it is a useful introduction to the subject” and “should be read as a supplement to the Code”. The third edition referred under the head “Monitoring Audiometry” to the possibility of monitoring checks, but did not repeat the suggestion in the second edition that monitoring should take place in respect of noise levels approaching those set out in table 1.

> "6. A Code of Practice, based on the work of Burns and Robinson was published by the Department of Employment in 1972. Its main messages were that employers must measure the noise in their premises and, if the noise level was 90dB(A)leq or above, must take steps to reduce the noise at source and, if that was not practicable, to provide ear protectors. The Code of Practice also explained that protection from noise of 90dB(A)leq would not protect all workers from hearing damage; some harm was likely to be caused to some susceptible workers by noise below that level."

The Court of Appeal was not justified in using the word "likely". What the relevant paragraph (1.1.2) in fact said was: "The Code sets out recommended limits to noise exposure. It should be noted that, on account of the large inherent variations of susceptibility between individuals, these limitations are not in themselves guaranteed to remove all risk of noise-induced hearing loss."

> "7. A set of tables first published in 1973 by the National Physical Laboratory (the NPL tables) showed the relationship between noise dose and the expected extent of hearing loss of persons with different degrees of susceptibility. Noise dose was based upon the daily exposure adjusted for the number of days' exposure in the year and the number of years' exposure. These tables were based on the work of Burns and Robinson. They were republished in 1977 in a more user-friendly form but the underlying science was the same as before and indeed it remains valid today. The tables demonstrated the harmful effect of prolonged exposure to noise below 90dB(A)leq but, because they were based on empirical data and because the data available for these lower noise levels was limited, there was some dependence on extrapolation. The degree of predicted risk arising from exposure to these lower levels of noise is therefore less certain than that caused by noise over 90dB(A)leq. That is of significance in the context of this appeal which raises the issue of when employers ought to have taken steps to protect their employees from exposure to such lower levels of noise."

These tables consisted of some 15 pages of introductory material and 149 pages of tables. The latter would require expert advice to interpret, but, even with such advice, they did no more than indicate in detailed statistical terms the risk to susceptible employees identified by the Code of Practice. The judge recorded (para 23) the expert evidence that the NPL tables were (as distinct from the ISO1999 tables mentioned in point 10 below) "less accurate below 90dB(A), though reasonably accurate above that level. They tend at lower levels to exaggerate the effect of noise". Some of the NPL tables were used in BS 5330: 1976 – mentioned in point 11, below.

> "8. Until 1989, the Government of the United Kingdom made no attempt of general application to regulate noise exposure in industry. In 1974, regulations were made to control noise in the woodworking industry and in tractor cabs. The regulations required employers to reduce noise to the greatest extent practicable and to provide ear protectors where persons were likely to be exposed to noise at or above 90dB(A)leq,
>
> 9. In 1975, a sub-committee of the Industrial Health Advisory Committee, set up after publication of the Code of Practice in 1972, reported on the problems of framing protective legislation. The gist of this report was that the noise limit recommended by the 1972 Code had widespread acceptance although it did not eliminate all risk of harm. 90dB(A)leq was the most practicable standard although a lower limit should be considered at regular intervals."

More particularly, para 19 of the report, "Framing Noise Legislation", read: "The Code's noise limit of 90dB(A)leq has widespread international acceptance, and although it does not eliminate all risk of hearing damage, we feel it continues to be the most practicable standard, in recognition of the necessity of concentrating limited resources on workers subject to the most significant risks and of eliminating these risks as a first priority. … Prediction of risks of hearing damage at these levels, based on a lifetime's exposure of 30 or 40 years, indicates that the proportion of an exposed population likely to suffer unacceptable degrees of impairment falls off rapidly below 90dB(A). The specification of a daily dose introduces a further margin of safety since it is unlikely that a large number of workers would receive the full daily limit throughout their entire working lifetimes. Similar conclusions have been reached in other major industrial countries, and none of those examined in our survey has introduced a generally applicable environmental limit lower than 90dB(A). Nevertheless, the question of a lower limit should be reconsidered at regular intervals. A level of 90dB(A) is by no means ideal, and the aim should be to ensure a progressive reduction".

> "10. In 1975 an international standard was published (ISO1999). This proposed a formula by which hearing loss could be predicted from various levels of noise exposure. It was not easy for a lay person to use. IS01999 did not suggest limits of tolerable exposure. It said that that was the province of 'competent authorities' who would demand the institution of hearing conservation programmes if limits were exceeded. It mentioned that 'in many cases', 85 to 90dB(A) equivalent continuous sound level had been chosen.

> 11. In 1976, a British Standard was published (BS 5330: 1976). This was based on the work of Burns and Robinson and explained the relationship between noise exposure and the expected incidence of hearing disability. The foreword stated that determination of a maximum tolerable noise exposure was outside the scope of the standard and referred the reader to the 1972 Code of Practice."

More particularly, BS 5330 said: "Determination of a maximum tolerable noise exposure is outside the scope of this standard; it involves consideration of risk in relation to other factors. For occupational noise exposure such a limit is specified in the Department of Employment (HMSO, 1972) Code of Practice for Reducing Exposure of Employed Persons to Noise".

> "12. In 1981, the Health and Safety Executive (HSE) issued a consultative document 'Protection of Hearing at Work' which included draft regulations and a draft approved code of practice. The proposed level of protection was at or above 90dB(A)lepd. These draft regulations were not promulgated.
>
> 13. In 1982, a draft directive was published by the European Commission, proposing a general limit of 85dB(A)lepd with ear protection to be provided at or above that level with medical surveillance and routine audiometry for all employees exposed at or above that level. This was greeted with some dismay by industry and was withdrawn in 1984. A further draft directive was published and was promulgated in 1986. This required member states to enact legislation which would, inter alia, require employers to provide ear protectors and information as to risks where employees were exposed to noise likely to exceed 85dB(A)lepd. Medical surveillance was to be made available to all exposed employees by means of access to a doctor. Thus, the only change of significance between the 1982 draft and the 1986 directive was that responsibility for medical surveillance would not fall on the employer but (at any rate in this country) would be satisfied through the provisions of the National Health Service. The Noise at Work Regulations 1989 (SI 1989/1790) implementing the directive came into effect on 1 January 1990."

The directive promulgated in (May) 1986 was Council Directive 86/188/EEC. It required member states to enact and to bring into force the relevant legislation by 1 January 1990. The Court of Appeal was not accurate in stating that the only difference between the 1982 draft and the actual directive in 1986 related to responsibility for medical surveillance. As the judge noted (para 39), the directive replaced the earlier withdrawn draft with "less stringent proposals": in short, where

daily personal noise exposure of a worker exceeded 90dB(A), the directive required the use by the worker of personal ear protectors (article 6(1)), but where such exposure was likely to exceed 85dB(A), it only required such protectors to be made available to workers (article 6(2)).

> "14. For the sake of completeness, although not relevant to this appeal, I mention that, in 2003, the European Commission issued a further directive imposing more stringent requirements. The Control of Noise at Work Regulations 2005 (SI 2005/1643) gave effect to that directive. Inter alia, they introduced a maximum permitted noise level of 87dB(A) and required employers to provide ear protectors to workers exposed to 85dB(A) and to make them available on request to workers exposed to 80dB(A)."

The judge in paras 46 to 48 also set out the general approach to noise in industry until the end of the 1980s, based on the oral evidence called before him.

16. Paras 46 to 48 of HHJ Inglis's judgment led him to reach the following conclusions on liability in para 87:

> "87. There is no doubt that research into the question of what risks to the hearing of employees exposure below 90dB(A)leq posed would have yielded the answer that 90dB(A) was not a natural cut off point, and that there were risks to susceptible individuals below that level. Indeed, the 1972 Guidelines themselves made that clear. From the early 1970s, certainly by 1976 with the publication of BS 5330 and of IS0 1999 in the previous year, the information was available if researched to give an indication of the level of the risk. It was a level of risk that came by the end of the 1980s to be seen as unacceptable if not accompanied by at least voluntary protection, though the 90dB(A) limit had remained, both in 1975 and in 1981, the proposed regulatory standard in England. In the end though I am not persuaded that employers in industry who conformed to the maximum acceptable level of exposure in the 1972 Guidelines were in breach of their duty of care to their employees who were exposed over 80dB(A)lepd. In rejecting the primary case for the claimants I acknowledge that I do not see the issue as only one of foreseeability. It would in my judgment be futile to hide behind the 1972 Guidelines for that purpose, or behind the third edition of "Noise and the Worker", when the documents themselves proclaim that the level proposed will not be safe for all workers. But good practice as informed by official guidance has in my view to be taken into account as well. The guidance as to the maximum acceptable level

> was official and clear. It would in my view be setting too high a standard to say that it was incumbent on employers to ignore it, and to reach and act, even as early as the 1960s, on a view that the standard set was inadequate to discharge their duty to their employees. To put it in the context of Swanwick J's judgment, complying with 90dB(A)lepd as the highest acceptable level was, I think, meeting the standards of the reasonable and prudent employer during the 1970s and 1980s, certainly until the time when the terms of the 1986 directive became generally known in the consultative document of 1987. I accept that this means that employers were not bound in the discharge of their duty to ask the question 'Who are those at risk in my factory, and how big is the risk'. It is a question that none of them in this case asked. But the effect of the maximum acceptable level in the Guidelines means in my judgment, that they were not in breach of their duty for not asking it."

17. The judge then distinguished the position of Meridian (Courtaulds) and Pretty Polly:

> "88. There is room, however, for 'greater than average knowledge' as Swanwick J put it, to inform the steps that individual employers should have taken at an earlier time than the late 1980s. At first sight it is not attractive that those who have a safety department and medical officers and take the matter of noise seriously should be worse off than those who wallow in relative ignorance, but it is an inevitable consequence of a test that depends on what an individual employer understood. On that basis, I have found that by the beginning of 1983 management both at Courtaulds and at Pretty Polly had sufficient understanding of the risks to hearing below 90dB(A)lepd to require them to take action. Both in fact say that they did so. Plainly putting a conservation programme into action, accompanied by information and instruction is not to be done in an instant, as Mustill J recognised in the passage in *Thompson* that I have set out above. In the case of those two employers, because of the particular state of their knowledge, I would say that they were in breach of their duty to employees who suffered damage through exposure at 85dB(A)lepd and over, without having the opportunity of using hearing protection, from the beginning of 1985."

Earlier in his judgment, HHJ Inglis had made detailed factual findings about the conduct and understanding of each of the relevant employers with regard to the risks of noise-induced hearing loss. I summarise these in the appendix to this judgment.

18. Smith LJ addressed the judge's conclusions on liability at common law as follows:

> "105. … I consider that the opinion, implied by the Code of Practice, that exposure to noise below 90dB(A)lepd was 'acceptable' was a factor which could properly be taken into account when an employer considered what it was reasonable for him to do in respect of the health and safety of his employees. In short, I take the view that Judge Inglis's holding which I quoted at paragraph 46 cannot be faulted. I would uphold his view that there was no breach of the duty at common law during the period for which a responsible body of opinion regarded it as 'acceptable' to expose employees to noise in the 85-89dB(A)lepd range. I consider that, for the employer with the ordinary or average degree of knowledge, the judge's conclusion that that period came to an end in 1987, following publication of the second European draft directive, was a reasonable conclusion, although, left to myself, I would have said that the publication of the first draft directive in 1982 would have put all employers on notice that it could no longer be regarded as acceptable or reasonable to leave this group of employees exposed.
>
> …
>
> 107. The judge imposed different dates of common law liability on Courtaulds and Pretty Polly from that of Quantum and Guy Warwick which he regarded as having only an average degree of knowledge. It is clear that from 1972 all employers should have been aware of the risk to some of their employees from exposure to 85-89dB(A)lepd. The question at common law was when they should have realised that it was no longer to be regarded as acceptable to disregard that risk. The judge's conclusion in respect of Courtaulds was plainly justified. They actively opposed the proposal in the first draft directive, not on the ground that the risk was minimal but on the ground that the cost to them would be too great. By early 1983, they could no longer have thought that a responsible body of opinion took the view that it was acceptable to ignore the risks of harm below 90dB(A)lepd. They should by that time have known which of their workers required protection and only a further six to nine months should be allowed for provision.
>
> 108. Pretty Polly was in a different position in that there was no direct evidence that it knew of the first draft directive. However, in my view the judge was entitled to hold that it must have done. In any

> event, there was other evidence that it had been advised of the need to take action in respect of the lower levels of noise. In my view, the judge's holding was justified, subject to the reduction in the period allowed for provision.
>
> 109. As a fall-back submission, Mr Hendy argued that the judge had been wrong to reach a different conclusion in respect of Quantum. There was evidence that it was aware of the first draft directive … and Mr Hendy submitted that, given that knowledge, it was irrational to say that, because the group was smaller than Pretty Polly or Courtaulds and operated as individual companies without the benefit of central advice on health and safety issues, they should be treated differently from the other two employers. I would accept that submission and would hold that, if it were to become material, Quantum would have been in breach of its common law duty at the same date as Courtaulds."

19. The judge and the Court of Appeal therefore accepted the Code of Practice as the generally appropriate standard for employers with average knowledge during the 1970s and early 1980s, differing only as to the date in the 1980s when it ceased to be so. The judge and, ostensibly at least, the Court of Appeal also distinguished between average employers and other employers, described by the judge as having "greater than average knowledge", differing however as to which employers fell into the latter category.

The parties' respective cases on common law liability

20. The respondent challenges the conclusion reached by both courts below that the Code of Practice represented a generally appropriate standard; she submits that it ceased to be such from at least 1976, though she does not in this case ask for that date to be substituted for the dates found by the Court of Appeal. For opposite reasons, the distinction drawn by the judge between employers with average and greater than average knowledge finds little support in any side's submissions. Mr Hendy positively asserts that all three appellant employers and the interveners were in the same position; that they should all be treated as having the same constructive knowledge (based on the generally available published provisions and materials); and that neither court below based its decision "upon specific evidence of knowledge of incidence of hearing problems in particular workforces, or technical or operational knowledge specific to the particular defendants" (respondent's case, para 202). So, on his submission, it was not appropriate to regard Quantum and Guy Warwick, or any employer, as any less liable than the judge held Meridian and Pretty Polly to be. The Court of Appeal, by putting Quantum into the same category as Meridian and Pretty Polly, went some, though

not the whole, way towards accepting this submission. The appellants, on the other hand, support the concurrent conclusion below that the Code of Practice constituted an appropriate standard for employers with average knowledge, submit that it continued to be so, as the judge held, until the late 1980s, but also submit that the judge failed to provide any satisfactory analysis of what he meant by "greater than average knowledge" in para 88, and that he had no basis for treating Meridian and Pretty Polly as liable by reference to any date other than that which he held applicable to "the reasonable and prudent employer during the 1970s and 1980s" of whom he spoke in para 87.

Analysis of common law position:

(a) Greater than average knowledge?

21. At the level of principle, the parties' submissions take one back to Swanwick and Mustill JJ's classic statements regarding the test of negligence at common law (paras 9 and 10 above). These statements identify two qualifications on the extent to which an employer can rely upon a recognised and established practice to exonerate itself from liability in negligence for failing to take further steps: one where the practice is "clearly bad", the other where, in the light of developing knowledge about the risks involved in some location or operation, a particular employer has acquired "greater than average knowledge of the risks". The question is not whether the employer owes any duty of care; that he (or it) certainly does. It is what performance discharges that duty of care. For that reason, I find difficult to accept as appropriate in principle some of the reasoning in another, more recent Court of Appeal authority, *Harris v BRB (Residuary) Ltd* [2005] EWCA Civ 900; [2005] ICR 1680 (Neuberger and Rix LJJ).

22. In *Harris*, the issue was whether regular exposure of train locomotive drivers between 1974 and 2000 to noise levels between 85dB(A) and 90dB(A) gave rise to liability for any noise-induced hearing loss shown to have resulted. Neuberger LJ gave the sole reasoned judgment. He accepted on the evidence before the court that, "at least until the 1989 Regulations came into force, … an employer would not normally be expected to be liable to an employee who was exposed to a level of sound lower than 90dB(A)leq", but said that "this evidence cannot go so far as to negative in all circumstances liability to employees whose health is impaired as a result of exposure to sound below that level" (para 39). After quoting Swanwick J, Neuberger LJ suggested that a good working approach might be to treat 90dB(A) as giving rise to a presumption, with the effect that, below 90dB(A), it was "for the employee to show why a duty should be imposed at all" (paras 40-41). The reference to a duty being imposed derives from the way in which the defendant's case was presented: the submission was that "the mere fact that a particular level of sound is potentially injurious does not of itself give

rise to a duty of care. … the existence of a duty of care 'depends not merely on foreseeability of injury but whether it is just and equitable to impose the duty" (para 36).

23. On this basis, Neuberger LJ said that, while not intending "to call into question the applicability in the general run of cases of the 90dB(A)leq threshold" each case "must turn very much on its facts, not least because of the 'just and equitable' test accepted, indeed advanced on behalf of the defendant …" (para 38). In my opinion, however, the adoption of such a test would import an extraneous concept. The primary inquiry, when considering whether an employer has acted with due care to avoid injury from noise-induced hearing loss, is whether there is a recognised and established practice to that end; if there is, the next question is whether the employer knows or ought to know that the practice is "clearly bad", or, alternatively, if the area is one where there is developing knowledge about the risks involved in some location or operation, whether the employer has acquired "greater than average knowledge of the risks". Considerations of justice and equity no doubt underlie both Swanwick and Mustill JJ's statements of principle. But to ignore the statements and to restate the inquiry in simple terms of "justice and equity" opens a wide and uncertain prospect, despite the court's attempts in *Harris* to emphasise that it was not departing from a position whereby an employer would not "normally" be expected to be liable for a level of sound lower than 90dB(A).

24. That prospect has a present resonance, although HHJ Inglis did not base himself on the reasoning in *Harris*, but used language picking up the more conventional statements of principle. Nonetheless, I consider that he did not apply those statements in the sense in which they were meant. He did not consider the practice represented in the Code to be clearly bad during the 1970s or until the end of the 1980s; and it is common ground that the general state of knowledge about the risks involved in the knitting industry remained essentially static throughout this period (see also the first seven sentences of para 87 of the judge's judgment). As Mr Hendy made clear in the Court of Appeal (Core II, pp.749-750), no question of special resources arises, since no amount of research would have led to further knowledge, or indeed to different conclusions about the level of risk than those indicated in the Code of Practice. Mr Hendy is in my opinion also correct in saying that the judge based his conclusions, including those relating to Courtaulds and Pretty Polly, on generally available published provisions and materials, rather than on any specific knowledge. That is particularly apparent from the final sentences of paras 56 and 66 of his judgment (cited in the appendix) as well as in paras 87 and 88. It might perhaps have been suggested, in relation to Courtaulds, that the rising incidence of claims which they experienced in the early 1980s gave rise to some degree of special knowledge, but that is not how the matter has been put.

25. It follows that, on the judge's approach, the only real difference between employers lay in the degree of their consideration of and reaction to such risks. In these circumstances, the judge's conclusions in relation to Meridian (Courtaulds) and Pretty Polly amount in substance to saying that, because these companies focused more closely on the potential risk below 90dB(A) and displayed greater than average social awareness (to use Mustill J's words in *Thompson* at p 415H) by resolving that some action should probably be taken at times before ordinary, reasonable employers arrived at any such conclusion, they incurred greater liability than such employers. The judge himself recognised here a paradox (para 88). Those who have a safety department and medical officers and take noise more seriously than the ordinary reasonable employer are liable, while others are not. That is appropriate if extra resources or diligence lead to relevant fresh knowledge. But here they have led simply to the formation or inception of a different view to that generally accepted about what precautions to take. In such a case, the effect of the judge's approach is not to blame employers "for not ploughing a lone furrow"; rather, it positively blames them for ploughing a lone furrow but not doing so deeply enough. When Mustill J spoke of "changes in social awareness" (p 415H), he was referring to changes leading to a general raising of the standard which average employers were expected to observe, not of individual employers spear-heading such changes by forming the view that the standard should be raised. On this aspect of the appeal, I would only add two points: first, had I considered there to be a sound basis for treating Courtaulds and Pretty Polly as having relevantly different and greater knowledge than average employers, I would see no basis for the Court of Appeal's addition of Quantum into the same special category; Lord Dyson and Lord Saville agree, I understand, that there was no such basis; secondly, since Lord Dyson does not share the view that the judge should not have treated even Courtaulds and Pretty Polly as falling into a special category (see para 104 below), it follows that there is no majority in favour of this view and that (in reflection of the common ground between Lord Dyson, Lord Saville and myself), the appeal should be allowed only to the extent of restoring the judge's decision in this regard.

(b) Was the Code of Conduct an acceptable standard for average employers?

26. In my opinion, the respondent is correct in submitting that the real question is the sustainability of the judge's conclusion that the Code of Practice constituted an acceptable standard for average employers to adhere to during the 1970s and 1980s. If that conclusion is upheld, then no real basis is shown for treating Courtaulds and Pretty Polly differently. The Court of Appeal expressed agreement with the judge's conclusion that the Code of Practice remained a generally acceptable standard. Smith LJ stated that this conclusion "cannot be faulted" and that "I would uphold his view that there was no breach of the duty at common law during the period for which a responsible body of opinion regarded it as 'acceptable' to expose employees to noise in the 85-89dB(A)lepd range" (para

105). Endorsing, in effect, the judge's approach of distinguishing between employers with average and greater than average knowledge, she concluded para 105 by saying:

> "I consider that, for the employer with the ordinary or average degree of knowledge, the judge's conclusion that that period came to an end in 1987, following publication of the second European draft directive, was a reasonable conclusion, although, left to myself, I would have said that the publication of the first draft directive in 1982 would have put all employers on notice that it could no longer be regarded as acceptable or reasonable to leave this group of employees exposed."

27. Turning to examine the different dates of common law liability which the judge had imposed, Smith LJ identified the issue as being when employers "should have realised that it was no longer to be regarded as acceptable to disregard" the risk to some of their employees from exposure to 85-89dB(A)lepd, of which they should, because of the Code of Practice, have been aware from 1972 (para 107). As regards Courtaulds, she regarded the judge's conclusion as plainly justified, saying that "By 1983, they could no longer have thought that a responsible body of opinion took the view that it was acceptable to ignore the risks of harm below 90dB(A)lepd" (para 107). However, that appears to say that from 1983 there was no responsible body of opinion in favour of relying on the Code of Practice, and, if so, it should on its face have led automatically to a conclusion that no reasonable employer could do so. Nonetheless, Smith LJ went on to consider the state of Pretty Polly's awareness about the need to take action and the 1982 draft directive and of Quantum's awareness of the draft directive. After noting Quantum's awareness of the draft directive, she accepted Mr Hendy's submission that "it was irrational to say that, because the group was smaller than Pretty Polly or Courtaulds and operated as individual companies without the benefit of central advice on health and safety issues, they should be treated differently from the other two employers" (para 109). While Smith LJ ostensibly viewed the issue (as the judge did) as depending upon analysis of each individual employer's position, in reality her approach seems to suggest a conclusion that the Code of Practice ceased to be an acceptable standard for any responsible employer in 1982. In effect, the Court of Appeal appears to have disagreed with HHJ Inglis's conclusion that the period during which a reasonable employer could rely upon the Code of Practice continued until 1987. The basis for this, despite the passage concluding para 105 of Smith LJ's judgment, quoted above, appears to have been the publication in 1982 of the first draft directive.

28. The judge's conclusion in para 87 was the product of a lengthy trial, and was based on extensive expert evidence. The Code of Practice itself repeatedly refers to a "limit" defined in section 4.3.1 in relation to continuous noise exposure

as 90dB(A)lepd: see e.g. sections 2.2.1, 3.1.2, 4.1.1, 4.2.1, 5.1.1, 6.1.3, 6.7.1 and 7.1.1. It also says that "Where it is reasonably practicable to do so it is desirable for the sound to be reduced to lower levels" (section 4.1.1), but this has to be read with section 6.1.3, which states: "Reduction of noise is always desirable, whether or not it is practicable to reduce the sound level to the limit set out in section 4, and whether or not it is also necessary for people to use ear protectors. Reduction below the limit in section 4 is desirable in order to reduce noise nuisance".

29. When addressing section 29(1) of the Factories Act 1961, the Court of Appeal said (para 101) that, although the Code of Practice was not irrelevant, "it was, in itself, plainly inadequate as an assessment tool", in that it "advised only that there was some risk to susceptible individuals from exposure below 90dB(A)lepd"; and it went on to conclude that the publication of BS 5330 in July 1976 could and should have enabled any average-sized employer in the knitting industry, with the assistance of anyone with a modest degree of mathematical skill or any consultant acoustic engineer, to make an informed assessment of the quantum of risk arising from noise below 90dB(A)lepd. These statements are not on their face easy to reconcile with the judge's findings (in particular in paras 46-48 and 87). However, they were made in the course of considering the issue of reasonable practicability under section 29, and on the basis that it was irrelevant in that context whether a reasonable employer could reasonably rely upon the Code of Practice as setting an acceptable standard of conduct in relation to exposure of employees to noise: see paras 89 and 100 (quoted in para 75 below). Even if regarded as consistent with the judge's findings, they do not therefore bear on the question whether the Code of Practice provided such a standard.

30. In any event, however, I do not consider that examination of the underlying statistical material undermines either the appropriateness or relevance of the Code of Practice as a guide to acceptable practice. Both the Code of Practice and BS 5330 were based on the research and statistics developed through the work of Burns and Robinson. BS 5330 itself stated that determination of a maximum tolerable noise exposure was outside its scope, that it involved consideration of risk in relation to other factors, and that for occupational exposure a limit was specified by the Code of Practice (para 15, above). The respondent in fact accepted in the Court of Appeal that there was no basis in this case for going behind the Code of Practice, while submitting that the Code was enough for her purposes (Core II, pp 749-750). If general standards of, or attitudes to, acceptable risk are left out of account, the statistical tables contained in the NPL tables, BS 5330 and ISO1999 could be used to suggest that no reasonable employer could from the early or mid-1970s expose his employees to noise exceeding 80dB(A)lepd. This would not be consistent with the contemporary recognition of the Code of Practice as setting a generally appropriate standard in BS 5330 itself as well as in other documents such as "Noise and the Worker" and the Industrial Health Advisory Committee report of 1975 (see para 15 above). The statistically identified risks at

levels between 80dB(A)lepd (currently, at least, identified with no risk) and 90dB(A)lepd do not enable any easy distinction to be drawn within that bracket, if the elimination of all statistical risk is taken as a criterion.

31. This is highlighted by consideration of the tables in BS 5330: 1976 upon which the respondent and the Court of Appeal (para 101) have relied to show the risk attaching at levels of exposure between 85 and 90dB(A) lepd. The same tables can be used to demonstrate the existence of risks (in terms of the percentage of persons exposed attaining or exceeding a mean hearing level of 30dB) arising below noise levels of 85dB(A)lepd. Caution is necessary because of the inherent inaccuracy, and tendency to exaggerate, of the NPL tables, and to the extent that they were based on them, the BS 5330: 1976 tables at all levels below 90dB(A) (para 15 above). But another, separate problem, which also applies to the ISO1999 tables, is that reliance on such tables as demonstrating the existence of a risk which needed counter-acting makes it necessary to confront the question on what basis any distinction exists between say an increase by an additional 6% in the level of risk for 60 year-old persons who have been exposed for 40 years at 86dB(A)lepd and by 5% for such a person so exposed at 85dB(A)lepd or by 4% for such a person so exposed at 84dB(A)lepd. The equivalent increases for 60 year-olds so exposed for 30 years would be 5½, 4½, and 3½%, and for 60 year-olds exposed for 20 years, 4, 3 and 2%. Consistently with this, the respondent did argue before the judge that 80dB(A)lepd was the only acceptable limit. But, despite this, the judge concluded that any risk below 85dB(A)lepd was minimal (para 26), and that the risk between 85dB(A)lepd and 90dB(A)lepd was at the relevant times an acceptable risk for reasonable employers without greater than average knowledge to take. The judge, correctly, did not resolve the issues before him by considering statistical extrapolations at low levels of exposure, but by forming a judgment on the whole of the expert, documentary and factual evidence adduced before him.

32. On the issue whether there was an acceptable contemporary standard to which reasonable employers could adhere, in the light of the terms of the Code of Practice and on the basis of the expert evidence, HHJ Inglis held (para 48) that “the 90dB(A)lepd level was regarded …. as the touchstone of reasonable standards that should be attained”. Confirmation existed in notes published by the Wolfson Unit for Noise and Vibration Control in the University of Southampton. These were intended to supplement a series of seminars held round the country in the autumn of 1976 on the theme "Industrial Noise - The Conduct of the Reasonable and Prudent Employer". The seminars were intended "primarily for company lawyers, solicitors, insurance claims and risk assessors, safety officers, medical officers and others with interests in occupational hearing loss". The notes were, the judge said, strong evidence of the prevailing advice being given to people in industry concerned with noise at that time. They described the 1972 Guidelines as establishing a comprehensive "damage risk criterion" based on 90dB(A)lepd, and said that they had been actively promulgated by the Factory Inspectorate. In

discussing the emerging principles of legal liability for noise-induced hearing loss, the authors said:

> "Over the last 15 years knowledge as to the relationship between noise and deafness has grown and become more precise .... Today a reasonable employer ought to know that to expose an employee to noise in excess of 90dB(A) for eight hours or its equivalent is potentially hazardous. It also seems a fair assumption that the reasonable employer should have known of the criteria set out in "Noise in Factories" and "Noise and the Worker" by the mid-1960s."

The introduction in 1974 and continuance in force at all times thereafter of woodworking and tractor regulations based on maximum exposures of 90dB(A) reinforce this comment (para 15, above, and para 56, below).

33. At least until the mid-1980s, there were still many people employed in industry exposed to over 90dB(A)lepd, and the approach of enforcement agencies and others was to concentrate on them (HHJ Inglis, para 48). The expert evidence before the judge also included the following, summarised by him in paras 46-48:

> "46. … There was evidence given by the expert witness engineers for Courtaulds (Mr Bramer and Mr Currie) about the approach to control of noise in the period from the 1970s in industry. The report of Mr Worthington for Pretty Polly and Guy Warwick is also in evidence. To Mr Bramer, the guidance in 'Noise and the Worker' and the 1972 Guidelines provided a 'clear and consistent recommendation to employers as to how they ought to deal with noise in the workplace'. The result was that in his practice, his invariable advice until the late 1980s, was that 'the relevant level was a daily personal noise exposure of 90dB(A)'. This approach, he said, was standard during the period up to 1989 among noise professionals, and taught at training courses. In the mid 1980s, when it appeared that EEC regulation would involve a first action level of 85dB(A) his advice changed to reflect that. He was not aware of the NPL tables before the 1980s when he found that they were being used by medical experts writing reports for the purpose of deafness claims. He has never come across them being used in any part of industry. In evidence Mr Bramer said that he gave advice to employers in terms of complying with the 1972 Code. He was speaking to the 90dB(A) level, as were all his colleagues. He agreed that the advice would be to answer the question 'Tell us how to comply with legislation and the Code of Practice', rather than 'Tell me how to avoid reasonably foreseeable risk to my workforce'. He

would have recommended 90dB(A) as the cut off point, but would also have said ‘that does not actually stop some more susceptible people from having some small noise induced hearing loss’. If asked about risk, he would have had some difficulty, and regarded the question as more one for medical people.

47. Mr Currie said that the Health and Safety Executive and factory inspectors after the Health and Safety at Work etc Act 1974 concentrated their advice and enforcement on the 90dB(A) level. He was not aware of any instance in which the NPL tables had been used by employers to predict the level of risk for their workforce. In evidence Mr Currie said that good practice won't necessarily remove all risk. He agreed that there has been no very different understanding about noise induced hearing loss since the 1970s. The first thing to look at when deciding on practices, which is what employers have to do, is to look at the guidance available.

Mr Worthington's report is to the effect that employers looked to the 90dB(A) limit in the Code of Practice as the maximum acceptable limit, and that the Factory Inspectorate and HSE did not refer employers to the risks below that limit as risks about which they should take action. That was the practice of the day, and employers taking advice, if they did, would be referred to the standard in the Code as being what had to be observed.

48. It is clear from some of the documents referred to above that by the beginning of the 1980s there were still many people employed in industry exposed over 90dB(A)lepd, and that the approach of enforcement agencies was to concentrate on those people. The evidence of the engineers referred to above suggests that that was a common approach until at least into the mid 1980s. That the 90dB(A)lepd level was regarded, as is the effect of the evidence of the engineers referred to above, in industry as the touchstone of reasonable standards that should be attained is evidenced by notes published by the Wolfson Unit for Noise and Vibration Control in the University of Southampton in 1976.”

34. Mr Bramer and Mr Currie were independent engineers called as witnesses at trial. There is no suggestion that they were employed by or advisers to Courtaulds or any of the other employers involved in this case at any date relevant to liability in this litigation. The judge was clearly impressed by their evidence. Whatever critique might, with hindsight, be directed at the advice or approach they said was being given or taken in respect of employers does not alter the fact that

this was the contemporaneous advice and approach, upon which the judge found that reasonable employers could generally rely, unless they fell into his category of employers with "greater than average knowledge".

35. The Court of Appeal attached considerable relevance to employers' awareness of the first draft directive prepared by the Commission in October 1982. As I have observed, the court did not accurately place the position of this directive in the development of legislation at the European level (para 15 above). More importantly, a Commission draft is only a proposal for legislation by the Council of Ministers, and no reliance was or is placed on any underlying material which may, or may not, have been produced in its preparation or support. The first draft directive was proposed by the Commission as a basis for legislation in 1982, proved controversial, and was withdrawn in 1984. It was superseded by a differently framed legislative proposal, agreed by the Council of Ministers in May 1986, which gave member states until 1 January 1990 to bring into force provisions complying with the directive.

36. In the light of the above, there is, in my opinion, no basis for the court to disturb the judge's conclusion in para 87 that the Code of Practice was an official and clear guidance which set an appropriate standard upon which a reasonable and prudent employer could legitimately rely in conducting his business until the late 1980s.

37. Before leaving this aspect, it is also worth noting one further small indication of the consistency of the judge's conclusion with informed contemporary attitudes. The relevant level of noise exposure above which a reasonable employer should take protective steps was of direct relevance in the early case of noise-induced hearing loss, *Kellett v British Rail Engineering Ltd* (Popplewell J, 3 May 1984). The strength of the representation attests to the importance attached to the issues. On the facts and in the light of agreed expert evidence, Popplewell J recorded that there had been exposure for long periods initially in the period 1946 to 1955 below 90dB(A) and then in the period 1955 to 1979 above 90dB(A), and proceeded on the basis that "The level of 90 is generally recognised as being a figure above which it is necessary for precautions to be taken". That was the basis on which it was accepted that the defendants, who had taken no precautions until 1979, were negligent.

(*c) What period should be allowed for implementation of any different standard?*

38. It follows, in relation to all the employers before the court, that the date when they should have been aware that it was no longer acceptable simply to comply with the Code of Practice was the date identified by the judge as applicable

to Quantum and Guy Warwick, that is "the time when the terms of the 1986 directive became generally known in the consultative document of 1987" (para 87). Dealing with this point, Smith LJ said (para 105):

> "I consider that, for the employer with the ordinary or average degree of knowledge, the judge's conclusion that that period came to an end in 1987, following publication of the second European draft directive, was a reasonable conclusion …"

Adding a further six to nine months for implementing protective measures (instead of the judge's period of two years), she went on to conclude (para 106) that:

> "In case it should ever become material, I would fix the date for breach of common law duty for the average employer at January 1988."

39. Leaving aside for the moment the difference in the period allowed for protective measures, that approach does not reflect the nuances of the judge's finding. The consultative document was issued in 1987, but seeking responses no later than 30 June 1988. Its terms would have become "generally known" during the period of consultation, which was to last to 30 June 1988. The judge was prepared to add a period of two years for "putting a conservation programme into action, accompanied by information and instruction" (para 88). This would bring the period before ear protection would have to be made available to those exposed to noise levels over 85dB(A)lepd to 1 January 1990, the date when the Directive and Regulations under it anyway required such protection to be made available to them. I therefore understand the judge as having held that Quantum and Guy Warwick had no potential common law liability in negligence before 1 January 1990.

40. The judge, in taking two years as the appropriate period for "putting a conservation programme into action, accompanied by information and instruction", referred to a further passage in *Thompson*. Mustill J there said (pp 423-424):

> "From what date would a reasonable employer, with proper but not extraordinary solicitude for the welfare of his workers, have identified the problem of excessive noise in his yard, recognised that it was capable of solution, found a possible solution, weighed up the potential advantages and disadvantages of that solution, decided to adopt it, acquired a supply of the protectors, set in train the

> programme of education necessary to persuade the men and their representatives that the system was useful and not potentially deleterious, experimented with the system, and finally put it into full effect? This question is not capable of an accurate answer: and indeed none is needed, as will appear when the scientific aspects of the case are considered.
>
> Various years were selected as rough markers, for the purpose of argument. I reject without hesitation the notion that the date lay somewhere in the years immediately preceding and following the Second World War. It was not until 1951, with the inconspicuous entry of the V-51R into the United Kingdom market that even a really enlightened employer would have started to ask himself whether something could be done. Even then, I consider that it pitches the standard of care too high to say that an employer would have been negligent, from that date, in failing to find, decide upon, and put into effect a system of using the protectors then available. At the other extreme, I consider that the choice of a date as late as 1973 cannot be sustained. The problem, and the existence of different ways in which it might have been combated, had been well known for years; there had been devices which were both reasonably effective, and reasonably easy to wear; and if the employers did not know precisely what they were they would have had no difficulty in finding out.
>
> All this being so, I conclude that the year 1963 marked the dividing line between a reasonable (if not consciously adopted) policy of following the same line of inaction as other employers in the trade, and a failure to be sufficiently alert and active to measure up to the standards laid down in the reported cases. After the publication of 'Noise and the Worker' there was no excuse for ignorance. Given the availability of Billesholm wool and reasonably effective ear muffs, there was no lack of a remedy. From that point, the defendants, by offering their employees nothing, were in breach of duty at common law."

41. The Court of Appeal disagreed with HHJ Inglis's period of two years on the basis that he was "allowing time not merely for the provision of ear protectors but also for the noise measurement and policy decisions which preceded the actual provision of protection" and that, by the time when employers should have appreciated the need for noise protection below 90dB(A), they must "be taken to have known already to which workshops that applied" (para 106). In paras 32 and 48 of her judgment, Smith LJ also noted that Courtaulds' noise committee had over a period of a year (between March 1983 and March 1984: see para 52 of HHJ

Inglis's judgment) identified areas of over 90dB(A)lepd and areas of 85 to 90dB(A)lepd.

42. There is a paucity of evidence in this area of the case. It is common ground that some period should be allowed, and the period chosen by the judge fits with periods chosen by courts in other contexts - see e.g. *Armstrong v British Coal Corporation* [1998] CLY 975, para 2842, *Smith v Wright & Beyer Ltd* [2001] EWCA Civ 1069, para 6, and *Brookes v South Yorkshire Passenger Transport Executive* [2005] EWCA Civ 452, paras 22-23 (and, less clearly on this point, *Doherty v Rugby Joinery (UK) Ltd* [2004] EWCA Civ 147; [2004] ICR 1272, paras 21 and 33-35) - as well as with periods commonly allowed for the implementation of new health or safety measures, e.g. under Directive 86/188/EEC and the Noise at Work Regulations 1989 which gave effect to it domestically. I do not see how it can be said that all employers who exposed their employees to noise levels between 85 and 90dB(A)lepd up to the end of 1987 must, Smith LJ's words (para 106) "by that time be taken to have known already to which workshops" the provisions of the Directive and Regulations would apply. An employer's duty towards a particular employee depends upon the circumstances of that particular employee's employment. Smith LJ appears to have derived the duty to have measured noise levels from the fact or likelihood that there were other employees exposed elsewhere by the relevant employers to noise levels exceeding 90dB(A)lepd (paras 92-93). But the relevant circumstance is that none of the employees to whom this case relates were employed in circumstances where they were exposed to noise levels exceeding 90dB(A)lepd. Accordingly, the relevant employers were not, on the judge's findings, under any duty to take further steps. The Code of Practice only stipulated that "All places where it is considered the limit in section 4 may be exceeded should be surveyed" (section 5.1.1). The limit referred to in section 4 for continuous exposure was that "If exposure is continued for eight hours in any one day, and is to a reasonably steady sound, the sound level should not exceed 90dB(A)" (section 4.3.1). I do not therefore consider that the basis on which the Court of Appeal interfered with the judge's conclusion on this point was justified.

43. Had my view prevailed that Courtaulds were in no significantly different position from Quantum and Guy Warwick as regards the date when they should have taken further steps to protect employees against the risk of hearing loss, I would still have held Courtaulds' position to differ in one material respect. At this point it would have been relevant that they were to some extent already ploughing a lone furrow. By mid-1984 they had in fact undertaken the relevant noise surveys and they already knew to which workshops the issue of exposure between 85 and 90dB(A)lepd applied. Accordingly, in relation to Courtaulds alone, I would have seen force in the view that a period of no more than nine months was long enough to perfect such steps as they were already contemplating. Bearing in mind that the consultation paper, on which the judge based the date by reference to which

employers generally should have begun to take action, was open for responses until mid-1988, I would have taken the end of 1988 as the latest date by when Courtaulds should have had full and effective protective measures in place for employees exposed to noise between 85 and 90dB(A)lepd. But since (as stated in paragraph 25 above) the judge's view will prevail that Courtaulds were (along with Pretty Polly) in a special position, and should have acted to take further steps from the start of 1983, they too must in my view be entitled to the two years allowed by the judge for the actual implementation of such steps, making them liable as the judge held from the start of 1985.

The Factories Act 1961

44. In relation to the scope and application of section 29(1) (set out in para 11 above), the Court of Appeal disagreed substantially from the judge, holding that the section involves a significantly more stringent standard of liability than any arising at common law. Several important issues arise on which there is no prior authority at the highest level: whether section 29(1) applies at all, where the claim relates not simply to the workplace, but to activities carried on at it; whether it applies to risks of noise-induced hearing loss arising from such activities in relation to long-term employees working in the place; whether the safety of a place is an absolute and unchanging concept or a relative concept, the practical implications of which may change with time; and what is meant by "so far as is reasonably practicable" and how it relates to the concept of safety.

(i) Lack of safety arising from activities

45. The first issue concerns the extent to which a place can be rendered unsafe by activities carried on at it. The appellants rely on the background to section 29(1) to argue that it cannot. Section 29 re-enacts section 26 of the Factories Act 1937, as amended by section 5 of the Factories Act 1959. Section 26, as originally enacted, did not have wording corresponding with the second part of section 29(1). The words "and every such place shall, so far as is reasonably practicable, be made and kept safe for any person working there" were added by section 5 of the 1959 Act. The amendment adding them was proposed late in the passage of the bill. It was felt to be "a real fault and a gap in the existing legislation" that it covered only the means of access to, and not the safety of, the place of work. The Minister, Mr Macleod, accepted the idea, and, ultimately accepted in substance the whole amendment (House of Commons Standing Committee B, 12 March 1959, 17th Sitting, cols 747-752). There had been a series of prior cases in which courts had had to distinguish, less than happily, between the place of work and means of access to it, and to reject claims on, for example, the ground that the employee was injured at his workplace on his way to the lavatory, rather than on his way to his workplace: see *Davies v de Havilland Aircraft Co Ltd* [1951] 1 KB 50; *Rose v*

Colville's Ltd 1950 SLT (Notes) 72; *Dorman Long & Co Ltd v Hillier* [1951] 1All ER 357 and *Prince v Carrier Engineering Co Ltd* [1955] 1 Lloyd's Rep 401. Looking at the matter today, one might perhaps have expected responsibility for the safety of the workplace to be a subject for legislative attention even before responsibility for the means of access to it. But, for whatever reason, that was not the original statutory scheme.

46. The gap was filled by the 1959 amendment. In considering the scope of the words added, Mr Beloff QC, on behalf of the first appellant, submits that the means of access looks to physical dangers or obstructions, that section 29(2) is likewise clearly focused on the physical risks inherent in working at height, and that the whole section is part of a scheme of criminal liability, from which any civil liability only follows "by judicial interpretation" (*Taylor v Coalite Oils & Chemicals Ltd* (1967) 3 KIR 315, 318, per Diplock LJ). This last point has some, though only limited, force, for two reasons. First, the criminal liability is under the Act imposed on the occupier or, in certain cases not presently relevant, on the owner of the factory. That to my mind suggests that responsibility under section 29 is likely to attach to matters over which an occupier (typically of course the employer him- or itself) would be expected to have control. But such matters would include not merely the physical state of the premises, but also, at least, the carrying on there of regular activities. Secondly, a person is "not to be put in peril upon an ambiguity, however much the purpose of the Act appeals to the predilection of the court" (*London and North Eastern Railway Co v Berriman* [1946] AC 278, 313-314, per Lord Simonds). However, it is only if the section is ambiguous, unclear or open to two reasonable interpretations that its penal effect may indicate the narrower construction (*Franklin v Gramophone Co Ltd* [1948] 1 KB 542, 557, per Somervell LJ), and courts should remember that the Factories Act is "a remedial measure passed for the protection of the workmen [which] must, therefore, be read so as to effect its object so far as the wording fairly and reasonably permits" (*Harrison v National Coal Board* [1951] AC 639, 650, per Lord Porter; *McCarthy v Coldair Ltd* [1951] 2 TLR 1226, per Denning LJ). Mr Beloff is however also right to remind the Court that it is always necessary to consider in what respects and to what extent the Act involves remedial measures.

47. Mr Beloff QC submits that there are three possible interpretations of section 29(1): a minimalist, a maximalist and a middle way. The minimalist would involve treating the section as confined to intrinsic aspects of the physical place, ignoring any activities carried on there. With the possible exception of the Delphic rejection of the claim under section 29 by Mustill J in *Thompson* at p 449C-D, there appears to be no reported case rejecting a claim under that section on this basis. Reference was made to the interpretation given to section 25(1) and by extension section 26(1) of the 1937 Act: in *Latimer v AEC Ltd* [1953] AC 643, the House held that section 25(1), which in its then form provided: "All floors, steps, stairs, passages and gangways shall be of sound construction and properly maintained", was not

breached when a structurally sound factory floor became wet and oily after a flood due to an unusually heavy rainstorm; and that approach was then applied under section 26(1) in *Levesley v Thomas Firth & John Brown Ltd* [1953] 1 WLR 1206 (CA), where in the course of some loading operations a block of iron was left temporarily protruding three inches out into a gangway, used as a means of access. This restriction of the word "maintained" in relation to the means of access has been strongly criticised in successive editions of Munkman's *Employer's Liability at Common Law*, and there is no reason to extend it to the words "be made and kept safe" which govern the duty, first introduced in 1959, in relation to the safety of the workplace. Indeed, it is clear from the Parliamentary materials that the words "and kept" were introduced specifically with the *Latimer* case in mind, and to make clear that *employers* should so conduct their business as to see that a workplace did not *become* unsafe. The examples were given of overstocking or slippery substances left on the floor (Factories Bill, Standing Committee B, 12 March 1959, cols 749-750).

48. A workplace may therefore be unsafe because of some feature which is neither structural nor permanent. But this does not determine whether a workplace may be unsafe by reason of operations carried on in or at it. Mr Beloff submits that the law took a wrong turn in *Evans v Sant* [1975] QB 626, when the Divisional Court initiated what he described as a middle approach which was later followed by the Court of Appeal in *Wilson v Wallpaper Manufacturers* [1982] CLY para 1364 and *Homer v Sandwell Castings Ltd* [1995] PIQR P318. In *Evans v Sant*, the Divisional Court (Lord Widgery CJ, Bridge and Shaw JJ), on a case stated by magistrates after conviction, said that the guiding light in their approach was that

> "in deciding whether the place of work was made safe, it is the place qua place that we look at, and not the place qua operation carried on upon the place" (p 635G-H).

But Lord Widgery CJ then went on (pp 635H-636B)

> "That does not mean of course that in deciding whether the place is made safe one has total disregard for the activities which go on in the place itself. The safety of the place depends not simply on the construction of the floor or the solidity of the walls, but it also depends in some degree upon the nature of the operations carried on therein. In so far as there is permanent equipment in the place, then its safety can in my judgment reflect on the safety of the place. In so far as there are activities carried on in the place which are constant, regular and recurring, I can well see that they may have their impact on the question of whether the place has been made safe."

49. In *Evans v Sant*, even this relaxed or "middle" approach did not enable the prosecution to succeed. The facts were that, in the course of laying a water-main, a test-head was attached between the pipe and a pump to test the water pressure, but it was insecurely fitted and, as pressure built up, it blew off, causing the death of a workman who ran into the path of a passing car. In allowing the defendant's appeal against conviction, Widgery CJ said, at p 636, that:

> "where, as in the present case, you start with a place safe in every degree, and the only thing which renders it unsafe is the fact that equipment brought upon it for a particular operation, and being used for a particular operation on a particular day, produces an element of danger, it seems to me that that is not enough to justify the allegation, certainly in criminal proceedings, that the place itself has not been made safe."

In *Homer v Sandwell Castings Ltd*, a civil claim failed because the danger "did not arise from any static condition of the place of work, but arose from the operation upon which the plaintiff was engaged" (p 320, per Russell LJ). The employee had noticed a slight leak through sand paste, which he had himself introduced to seal a gap, but had carried on working, with the result that an eruption of molten metal through the seal fell onto his foot.

50. The appellants support their case on section 29(1) by reference to the layout as well as other specific sections of the 1961 Act. These, they submit, are only consistent with a limited interpretation, confining it to physical dangers inherent in the structure. They point out that section 55 addresses "any process or work carried on" or to be carried on in any premises used or intended to be used as a factory; it gives a magistrates' court power, if satisfied that such process or work "cannot be so carried on with due regard to the safety, health and welfare of the persons employed", to prohibit the use of the premises for that process or work. They also point to various other sections designed to address problems arising from operations carried on in premises. For example section 4 requires suitable and effective provision for circulation of fresh air, and "for rendering harmless, so far as practicable, all such fumes, dust and other impurities generated in the course of any process or work carried on in the factory as may be injurious to health"; section 14 requires (with immaterial exceptions) "Every dangerous part of any machinery … [to] be securely fenced unless it is in such a position or of such construction as to be as safe to every person employed or working on the premises as it would be if securely fenced"; and section 27 requires all parts and working gear to "be of good construction, sound material, adequate strength and free from patent defect, and … properly maintained".

51. However, the sections of the Act are not exclusive codes in relation to their particular subject matters (see e.g. *Liptrot v British Railways Board* [1969] 1 AC 136), and it is not axiomatic that there cannot be overlap between the application of two different sections. It seems to me good sense to describe a workplace as unsafe, if operations constantly and regularly carried on in it make it so. It is unnecessary to comment on the decisions on particular facts, but section 29(1) cannot in my opinion have a narrower meaning than that given it in *Evans v Sant* and the later cases following *Evans v Sant*. To take another example, a place may well, as it seems to me, be unsafe by reason of activities carried on in it, e.g. if a shop-floor were to be constantly crossed by fork-lift trucks passing from a store on one side to somewhere else on the other side of it. In the present case, the noise generated by knitting and other machines was a permanent feature of the operations which were intrinsic to the workplace. If the section is directed to noise at all, then such noise must, on the approach taken in *Evans v Sant*, make the place unsafe. It is unnecessary to say more on the facts of this case.

(ii) Lack of safety arising from noise

52. The second issue is whether section 29 is directed to noise. This is more open to question. There is much to suggest that noise was not in the legislature's mind at all, when section 26(1) of the 1937 Act was expanded to cover the safety of the workplace in 1959 and later re-enacted as section 29(1) of the 1961 Act. Further, the relevant noise is not noise of a literally deafening nature, causing immediate injury. It is noise which would only injure some people and then only if they were exposed to it for continuous periods lasting many years. The appellants submit that a requirement that the workplace "be made and kept safe for any person working there" is inapt to cover a situation where many or all of the persons working there may never be at any risk, because they have not been there long enough and may never be, or because they may not be susceptible to suffering such noise-induced hearing loss.

53. The appellants further submit that the fact that the principal protective measure suggested consists in the provision of ear protectors, rather than any corrective measures affecting the workplace itself or any regular feature of it, indicates or suggests that section 29(1) is inapplicable. I am not impressed by this point. If a workplace can be unsafe for employees by reason of constant and regular activities carried on at it, I do not see why it should not be rendered safe by counter-acting measures of an equally constant and regular nature relating to the clothes or equipment worn by employees.

54. On the other hand, the scheme of the 1961 Act does indicate that, even though section 29(1) is to be read as indicated in *Evans v Sant*, it is essentially dealing with safety, rather than health. Safety typically covers accidents. Health

covers longer-term and more insidious disease, infirmity or injury to well-being suffered by an employee. Hearing loss, at least of the nature presently in issue, falls most naturally into this latter category. The 1961 Act is divided into Parts, the first four being headed (I) Health (General Provisions), (II) Safety (General Provisions), (III) Welfare (General Provisions) and (IV) Health, Safety and Welfare (Special Provisions and Regulations). Part I comprising sections 1 to 11 deals with cleanliness, overcrowding, temperature, ventilation, lighting, drainage of floors, sanitary conveniences, and enforcement powers; while Part II contains, in addition to section 29, a wide variety of sections covering inter alia machinery, dangerous substances, hoists, lifts, openings and doorways, chains, ropes, lifting apparatus, floors, passages and stairs, fumes and lack of oxygen in confined spaces, explosive or inflammable dust, vapour or substance, boilers, means of escape and fire. The general distinction between health and safety provisions was also present in the 1937 Act, and significance was attached to it in *Clifford v Charles H Challen & Son Ltd* [1951] 1 KB 495, 498, per Denning LJ and *Ebbs v James Whitson & Co Ltd* [1952] 2 QB 877, 886, per Hodson LJ.

55. As to the legislative mind-set in 1959 and 1961, the government promoting the 1959 Act made no mention of noise. The only relevant reference to noise by any MP in debate concerned the possibility that the minister might take advice on and look more closely at noise, with a view to making regulations under section 60 of the 1937 Act as amended (later section 76 of the 1961 Act), enabling the minister to make regulations where satisfied that, inter alia, any process was "of such a nature as to cause risk of bodily injury". Likewise, when the Offices, Shops and Railways Premises Bill came before Parliament in November 1962 and March 1963, comments were made on the absence of any provision dealing with noise. Initially, the minister directed attention to the general power to make regulations for securing health and safety, but ultimately section 21 was included, specifically permitting regulations to protect "from risks of bodily injury or injury to health arising from noise or vibrations". The minister in the House of Lords commented on section 21: "This is a new subject, on which we still have much to learn" (House of Commons, 2nd reading, 15 November 1962, Hansard cols 615, 618-619 and House of Lords 2nd reading, 18 March 1963, Hansard, col 948).

56. It was not until April 1960 that Sir Alan Wilson's committee was set up to report on noise, and only in March and July 1963 that it issued interim and final reports. The main focus was on ambient noise and, in discussing the general effects of noise in chapter II, the report said, in relation to noise in a working environment, merely that "it may disturb concentration, and perhaps affect the efficiency of someone working at a difficult or skilful task; it may affect personal safety". In outlining the law relating to noise in chapter III, the report identified the common law of nuisance and the Noise Abatement Act 1960. However, chapter XIII addressed occupational exposure to high levels of noise. It noted that it had been established that "a permanent reduction of hearing sensitivity can occur in

people who are exposed for long periods to noisy environments, such as are found in some industries" (para 513). But it made clear the understanding that there was no existing legislation applicable to such noise and no sufficient basis for introducing any without further research. It said (para 534):

> "Although voluntary action is now possible and, indeed, essential, we do not consider that the present knowledge of this complex problem provides a sufficient basis for legislation. Although the levels of continuous, broadband noise which represent a hazard to the hearing of people who are exposed to them for long, unbroken periods have been established within certain margins of error, many uncertainties remain. There is no satisfactory means of predicting the susceptibility of individuals to hearing loss, nor is the distribution of susceptibility known; the comparative danger of noises in which energy is concentrated in narrow frequency bands is not determined; nor is the influence on hearing loss of impulsive noises, which are common in industry. Neither is there much information on the physical properties of industrial noise, the distribution of noise of any given type in industry and the practicability of minimising those properties which are found to be dangerous to hearing. If early legislation were introduced it could do no more than lay down general standards, the effect and cost of which cannot at present be estimated. If the standards adopted proved to be too severe in some respects the industries affected might be exposed to heavy unnecessary expenditure; on the other hand if minimum standards were adopted, these would tend to suggest that compliance with these standards was all that was needed even in parts of industry where there were important hazards at lower sound pressure levels or with shorter exposure. Legislative insistence on the wearing of ear protectors would be particularly difficult to introduce until there is a wider recognition of the need for them in noisy industries. Early legislation would, therefore, have to be very general in its terms and it would be impossible to enforce effectively. We think that, at present, it would not achieve as much as vigorous voluntary action. In our view, before practical legislation could be considered, it would be necessary to establish the extent of the risk to average people of exposure to industrial noise, and the cost and possibility of measures which would effectively reduce this risk to the point which, on balance, was regarded as acceptable."

In paras 535-536, the report suggested a further research programme, to be followed by more detailed surveys of individual industries and processes, and then, when the results of such surveys were available, consideration by government

"whether the time has not then come to lay down by legislation minimum standards to protect workers against damaging noise exposure in industry".

57. The Annual Report of HM Chief Inspector of Factories on Industrial Health for 1965 (Cmnd. 3081) also stated at p 79 that

> "At present there is no legislation requiring the control of noise in factories, nor is occupational deafness prescribed under the National Insurance (Industrial Injuries) Act 1965. The problem was examined in detail by the Wilson Committee, whose report was published in 1963. They concluded that the knowledge then existing was insufficient to enable legislation to be made. They advocated research and indicated some of the lines this should take. At present a very great deal of research is being conducted by various bodies.…"

58. The Report of a Committee chaired by Lord Robens in 1970-72 (Cmnd 5034) referred to the Wilson Committee's words (para 341), but went on to record the research recorded in Prof Burns's and Dr Robinson's 1970 report, *Hearing and Noise in Industry*. The research had "established a system of predicting on a statistical basis the hearing deterioration to be expected for specified exposures within a wide range of industrial noise" and the report had "amongst other things … suggested that workers should not be consistently exposed over long periods to a noise emission level higher than 90dB(A)" (para 342). Robens then mentioned that industrial noise had now become a live issue in the field of compensation claims, referring to a case where "a court awarded damages for the first time" (para 344). This must have been *Berry v Stone Manganese and Marine Ltd* [1972] 1 Lloyd's Rep 182, where a claim for common law negligence succeeded in respect of noise which "amounted to about 115 to 120 decibels, whereas the … tolerable noise is about 90" and no ear muffs had been provided (p 184). A claim under section 29(1) was in fact also introduced by amendment at trial. It was not argued on the basis of failure to provide ear muffs, but of alleged failure to reduce the actual noise level as far as reasonably practicable, and it failed on the facts. Robens continued that, since "the relationship between exposure to certain levels of noise and hearing loss [was] now recognised" the time was "ripe to include basic requirements on noise control in occupational safety and health legislation" (para 345).

59. Lord Robens's recommendation stimulated the inclusion of regulation 44 in the Woodworking Machines Regulations 1974 (SI 1974/903) made under section 76 of the 1961 Act. In relation to factories using woodworking machines, regulation 44 requires that, "where on any day any person employed is likely to be exposed continuously for eight hours to a sound level of 90dB(A)" or equivalent or

greater, then "(i) such measures as are reasonably practicable shall be taken to reduce noise to the greatest extent which is reasonably practicable; and (ii) suitable ear protectors shall be provided and made readily available for the use of every such person". Later in 1974, there were also made, under agricultural health and safety legislation, the Agriculture (Tractor Cabs) Regulations 1974 (SI 1974/2034), regulation 3(3) of which provided that ministerial approval of safety cabs required ministers to be satisfied that the noise levels inside "would not be more than 90dB(A)". The existence of specific regulations under section 76 is not necessarily inconsistent with a more general duty of safety existing in respect of noise under section 29(1), though the inter-relationship could give rise to problems and one might have expected or at least hoped that it would be clarified.

60. HM Chief Inspector of Factories' report for 1974 (Cmnd 6322) referred to the Woodworking Machines Regulations 1974 as "the first British regulations to contain a legal requirement specifically intended to protect factory workers against the effects of noise" (p 73). Under the heading of Noise and Vibration, it also noted (p 71) that

> "The Inspectorate has been mainly concerned with protection of workers against levels of noise exposure likely to cause permanent hearing damage. To this end continuing efforts have been made to encourage voluntary compliance with the Code of Practice …, which recommends that where people are likely to be exposed to sound levels over 90dB(A) for eight hours per day (or to suffer an equivalent exposure) action should be taken to reduce the noise exposure, and ensure that ear protection is provided and used".

61. The position is therefore that section 29(1) is part of the statutory provisions dealing with safety, and it was enacted without any appreciation that it could cover noise or noise-induced hearing loss. Noise-induced hearing loss was not a newly discovered phenomenon, at least in heavy industry, where it was evidently regarded as an inescapable fact of life (see e.g. *Thompson*, p 409A, per Mustill J). An immediately injuring noise (like that which punctured the Duke of Wellington's ear-drum when he stood too close to the firing of a battery in his honour) could probably only occur as a result of some one-off error or break-down in the workplace, which would not reflect on its safety, although it could give rise to common law liability in negligence. None of the contemporary reports or documents suggests that the possibility of noise was in anyone's mind or would have been conceived of as an element of safety of the workplace in 1959 or 1961. It follows that there is considerable force in the appellants' submission that section 29(1) does not refer to safety in a sense depending not upon the current condition of the workplace with its noisy machinery, but upon the periods for which employees have worked, or are likely to continue to work in that, or another, workplace with equivalent or greater noise levels and upon their particular

susceptibility to noise. Ultimately, however, I have come to the conclusion that it is not possible to be so categorical, and that the answer to the present issue links up with the next issue, that is how far responsibility under section 29(1) is absolute or relative. If section 29(1) imposes absolute liability, irrespective in particular of current attitudes or standards from time to time, then noise-induced loss appears so far outside the thinking behind and aim of section 29(1) that I doubt whether it would be right to construe the section as covering it. But if liability under section 29(1) is relative, depending in particular on knowledge about and attitudes to safety from time to time, then, as thinking develops, the safety of a workplace may embrace matters which were previously disregarded, but have now become central or relevant to reasonable employers' and employees' view of safety.

(iii) The absolute or relative nature of safety

62. The third issue is whether the requirements regarding safety in section 29(1) are absolute or relative. In the respondent's submission, they are absolute: what is safe is objective, unchanging and independent of any foresight of injury; the only qualification on an employer's liability, where a workplace is unsafe because of employees' exposure to noise, is if the employer can show that it was not reasonably practicable to reduce or avoid the exposure, e.g. by providing ear protectors. The House of Lords, by a majority, held in *Nimmo v Alexander Cowan & Sons Ltd* [1968] AC 107 that the onus lies on the employer to plead and prove under section 29(1) that it was not reasonably practicable to make and keep a place safe.

63. Smith LJ accepted the submission that safety is an absolute. She said that "what is objectively unsafe cannot change with time" (para 78). She also associated lack of safety with the occurrence of injury to a single person, for she continued:

> "If 85dB(A)lepd causes deafness to a particular claimant, that claimant's place of work was not safe for him or her. It might have been safe for another person working alongside. But for the susceptible worker who has in fact been damaged, it can be demonstrated, without more, that his or her place of work was not safe. Looking at matters from the point of view of the work force generally, it is known that a minority of people will suffer appreciable harm as the result of prolonged exposure to 85dB(A)lepd. Therefore, it can be said that the place of work is not safe for the workforce because there is a risk of injury to all of them."

64. I do not accept this approach. Whether a place is safe involves a judgment, one which is objectively assessed of course, but by reference to the knowledge and standards of the time. There is no such thing as an unchanging concept of safety. The Court of Appeal's approach means in reality that any court determining an issue of safety would be applying (retrospectively) whatever happened to be the view of safety current at the time the matter came before it. Further, the fact that a single person has suffered injury due to some feature of the workplace is not, without more, proof that the workplace was unsafe. As Lord Upjohn (one of the majority) said in *Nimmo* (p 126C-D), "the section requires the occupier to make it [the workplace] 100 per cent safe (judged of course by a reasonable standard of care) if that is reasonably practicable and, if it is not, to make it as safe so far as is reasonably practicable to a lower percentage".

65. Prior to the 1959 and 1961 Acts, the requirement, under regulation 5 of the Building (Safety, Health and Welfare) Regulations 1948 (SI 1948/1145), that "sufficient safe means of access shall so far as is reasonably practicable be provided", had been considered in *Sheppey v Matthew T Shaw & Co Ltd* [1952] 1 TLR 1272 and *Trott v WE Smith (Erectors) Ltd* [1957] 1 WLR 1154 (CA). There it was said, by respectively Parker J at p 1274 and Jenkins LJ at p 1159, that safe cannot mean "absolutely safe", although it must take account of circumstances likely to occur, including the fact that employees do not always behave with reasonable care for their own safety. I also note that in *Trott*, Jenkins LJ after suggesting that the statutory obligation was stricter than the general duty of reasonable care at common law and anticipating *Nimmo* by identifying the qualification "so far as is reasonably practicable" as involving a shift of the burden of proof (pp 1158-59), ended his judgment by saying that to regard the standard of care prescribed by regulation 5 and at common law as approximating to each other was "if not absolutely right …. at all events not very far wrong" (p 1162). Likewise, in relation to a similar requirement under the Shipbuilding and Ship-repairing Regulations 1960 (SI 1960/1932), it was argued in *Paramor v Dover Harbour Board* [1967] 2 Lloyd's Rep 107 "that if the bare possibility of injury and accident could reasonably be foreseen, then the means of access is not 'safe'". In response, Salmon LJ said (p 109) that there "is, of course, a risk of injury and accident inherent in every human operation" but that whether a means of access was safe involved "assessing the risk in all the circumstances of the case" and "must be a question of fact and degree in each case".

66. The successor legislation to the 1961 Act, the Health and Safety at Work Act etc 1974 was differently, and on its face more broadly, formulated. It required every employer by section 2(1) to ensure, so far as is reasonably practicable, the health, safety and welfare of all his employees, and by section 3(1) to conduct his undertaking in such a way that other persons were not thereby exposed to risks to their health or safety. The concept of safety was considered in this context in *R v Chargot Ltd (trading as Contract Services)* [2008] UKHL 73 [2009] 1 WLR 1.

Lord Hope, with whose speech all other members of the House agreed, said that the legislation was "not contemplating risks that are trivial or fanciful", that the statutory framework was "intended to be a constructive one, not excessively burdensome", that the law "does not aim to create an environment that is entirely risk free" and that the word "risk" which the statute uses "is directed at situations where there is a material risk to health and safety, which any reasonable person would appreciate and take steps to guard against" (para 27).

67. It would be strange if the earlier, narrower formulation in section 29(1) had a more stringent effect. Similar comments to Lord Hope's had also been made in the earlier case of *R (Junttan Oy) v Bristol Magistrates' Court* [2003] UKHL 55; [2003] ICR 1475, in relation to regulations requiring machinery to be in fact safe, "safe" being defined to mean giving rise to "no risk (apart from one reduced to a minimum) of its endangering the health of or of its being the cause or occasion of death or injury to persons". Lords Nicholls and Hobhouse (both dissenting on presently immaterial points) made clear in that context that "safe" is not an absolute standard. Lord Nicholls said (para 22): "There may be differences of view on whether the degree of safety of a particular piece of machinery is acceptable". Lord Hobhouse said (para 103) that:

> "to describe questions of safety as simple questions of fact, just as if one was asking whether a given bird is a sparrow or a sparrowhawk, is to make a fundamental and elementary mistake. Safety is a question of opinion. There is no such thing as absolute safety. All safety is relative. Two men can legitimately hold different opinions [as to] whether a machine is safe or unsafe. Different assessments can be and are made of the safety of a particular machine by the authorities in different countries".

68. If safety is a relative concept, then foreseeability must play a part in determining whether a place is or was safe. Mr Hendy submits that foresight has no such role; it can come in, if at all, only at the second stage, when considering whether it was reasonably practicable to make and keep the place safe. He also notes that there was in any event, on the judge's findings, foresight in the present case of some statistical risk of injury. On the role of foresight, there are differing strands of authority. Not long before the 1959 Act, the House had in *John Summers & Sons Ltd v Frost* [1955] AC 740 considered the requirement under section 14(1) of the 1937 Act that "Every dangerous part of any machinery … shall be securely fenced unless it is in such a position or of such construction as to be as safe to every person employed or working on the premises as it would be if securely fenced", and had applied to the concept of dangerousness an approach dating back to *Hindle v Birtwhistle* [1897] 1 QB 192, namely that a machine or part is dangerous "if in the ordinary course of human affairs danger may reasonably be anticipated from the use of them without protection", and that it was

"impossible to say that because an accident had happened once therefore the machine was dangerous". Lords Reid and Keith at pp 765-766 and 774 expressly endorsed the relevance of determining whether the degree of danger was such that there was "a reasonably foreseeable cause of injury".

69. The same approach, again based on *Hindle v Birtwhistle*, was followed under section 14 in *Close v Steel Co of Wales Ltd* [1962] AC 367. The claim there failed because "in the ordinary course of human affairs danger could not reasonably be anticipated from the use of the drill unfenced" (p 382, per Lord Denning, with whom Lord Morton agreed on this point at p 398); "the risk of injury, serious and regrettable as it proved to be, was not reasonably foreseeable" (p 389, per Lord Goddard); and "No reasonable employer could have been expected to anticipate any risk of significant injury" (p 412, per Lord Guest).

70. *Close* proved controversial on another, presently irrelevant, aspect (whether the duty to fence extended to preventing fragments flying out of a machine) on which it was criticised in paragraph 7 of Appendix 7 to the Robens Report. But the endorsement in *Close* of the concept of foreseeability taken from *Hindle v Birtwhistle* was noted without criticism in paragraph 5 of Appendix 7 to the Robens Report and was regarded as correct by contemporaneous commentators in The Solicitors' Journal (*The Duty to fence dangerous machinery*: (1961) 105 Sol J 997) and The Modern Law Review (*New Wave of Interpretation of the Factories Acts*: (1962) 25 MLR 98, commending "the broad common-sense view of danger" taken in *Hindle v Birtwhistle*), though it was regretted by John Munkman, writing in The Law Journal (*The Fencing of Machinery*: (1962) LJ 761).

71. The concept of foreseeability continued to be adopted by courts, most notably, in *Taylor v Coalite Oils & Chemicals Ltd* (1967) 3 KIR 315. In *Allen v Avon Rubber Co Ltd* [1986] ICR 695, the Court of Appeal also endorsed it under section 29(1) of the 1961 Act. In *Taylor*, Diplock LJ said, obiter (pp 319-320):

> "'Safe' is the converse of 'dangerous'. A working place is 'safe' if there is nothing there which might be a reasonably foreseeable cause of injury to anyone working there, acting in a way in which a human being may reasonably be expected to act, in circumstances which may reasonably be expected to occur: see *John Summers & Sons Ltd v Frost* [1955] AC 740, per Lord Reid at p 766. In determining, therefore, whether the occupier was under a duty to take any measures to prevent an accident which was caused by the presence at a working place of a particular object, it is necessary to ask, first, whether the possibility of an object of that kind being at that particular place was reasonably foreseeable, and, if so, secondly, whether it was reasonably foreseeable that it would be a cause of

> injury to a person working there. It is only if both those questions are answered affirmatively that it becomes necessary to consider whether it was 'reasonably practicable' to avert the danger."

72. More recently, in *Robb v Salamis (M & I) Ltd* [2006] UKHL 56; [2007] ICR 175, Lord Hope confirmed the relevance of reasonable foreseeability to article 5(1) of the Framework Directive 89/391/EEC (imposing on employers the duty to ensure the safety and health of workers in every aspect related to the work) and article 3(1) of the Work Equipment Directive 89/655/EEC (requiring employers to take the measures necessary to ensure that the work equipment made available to workers is suitable for the work to be carried out), stating that "The obligation is to anticipate situations which may give rise to accidents" (para 24).

73. The respondent relies on a different stream of authority, consisting of *Robertson v RB Cowe & Co* 1970 SLT 122, *Larner v British Steel plc* [1993] ICR 551, *Neill v Greater Glasgow Health Board* [1994] SLR 673, [1996] SC 185 and *Mains v Uniroyal Englebert Tyres Ltd* [1995] SC 518. The Court of Appeal in the present case held that it was bound by *Larner*, as well as expressing agreement with it.

74. *Robertson* concerned a trestle erected on a marine slipway which moved causing a workman to fall. Lord Guthrie concluded "from the whole circumstances elicited … as to the position of the staging, the way in which the pursuer worked, the outward movement of the trestle, and where the pursuer fell" that "on a balance of probabilities … the erection was insecure and unsafe" (p 129). Lord Migdale treated the fact that the trestle fell over as proof that it was not safe, and both he and, with hesitation, Lord President Clyde concluded that the decision in *Nimmo* meant that breach of section 29(1) was established once it was proved that the trestle was not sufficiently stable to support a workman doing his job there normally. There was no plea that it was not reasonably practicable to make or keep the trestle safe, and Lord Guthrie noted the obvious difficulty that such a plea would have faced. Lords Guthrie and Migdale rejected a submission based on the line of authority including *John Summers* and *Close*, that the employee had to prove that the accident was reasonably foreseeable. The basic issue was whether the trestle was insecure as erected, or whether it fell because the pursuer over-reached (pp 128-129).

75. *Larner* concerned an undetected crack which caused a structure to fall on the plaintiff. The Court of Appeal preferred the reasoning in *Robertson* to Diplock LJ's dicta in *Taylor* and rejected foreseeability as a test of safety. In *Mains* the injury arose when a piece of machinery made an involuntary and unexpected movement, the cause of which was never ascertained, and so trapped the workman's hand; and it was common ground that the circumstances of the

accident and its cause were not reasonably foreseeable. The Inner House took the same view as in, and followed, *Larner*.

76. In so far as *Robertson*, *Larner* and *Mains* stand for a proposition accepted by the Court of Appeal in the present case, that safety is an eternal absolute independent of any judgment based on current standards and attitudes, then I do not accept their correctness. One factor in the decisions in both *Larner* and *Robertson* was that the introduction of foreseeability would reduce the "utility of the section", by frequently limiting success under it to circumstances in which a common law claim for negligence would succeed (*Larner*, p 560A, per Hirst LJ, and p 562C-D, per Peter Gibson J; *Mains*, p 531D-E, per Lord Sutherland and p 535G-H and 536H-537B, per Lord Johnston). This begs the question as to the intended scope and effect of the section. Not only does the section introduce criminal sanctions, but, as established in *Nimmo*, if the workplace is unsafe, then the burden shifts to the employer to show that it was not reasonably practicable to make and keep it safe. It was in this connection that in *Nimmo* Lord Guest said that he could "not think that the section was intended to place such a limited obligation on employers" as they would have at common law (where it would be for an injured employee to plead and prove failure to take reasonably practicable steps) (p 122F-G), and that Lord Upjohn (whose view that safety is "judged of course by a reasonable standard" I have already quoted in paragraph 64 above) added that "it is not in doubt that the whole object of the Factories Act is to reinforce the common law obligation of the employer to take care for the safety of his workmen" (p 125B).

77. Further, section 29(1) imposes a non-delegable duty, so that an employer is responsible for achieving or for the taking all reasonably practicable measures to achieve the requisite safety irrespective of whether he chooses to set about doing this through himself, his servants or independent contractors.

78. There is nothing to show that section 29(1) was intended to go further, and there is no assumption (or, in my opinion, likelihood) that it was intended to. The standard of reasonableness expressed in the qualification "so far as is reasonably practicable" (in respect of which the onus of proof is on the employer) makes it more, rather than less, likely in my view that the concept of safety is itself to be judged, as Lord Upjohn thought obvious in *Nimmo*, by reference to what would, according to the knowledge and standards of the relevant time, have been regarded as safe (see further paragraph 79 et seq. below).

79. Peter Gibson J (at p 562G-H) regarded it as surprising that the approach in *John Summers*, based on section 14(1) of the 1937 Act containing no qualification of reasonable practicability, should have been regarded as relevant under section 29(1) of the 1961 Act which does contain such a qualification. The same point was

made in *Mains* (pp 527A-D and 531D-F, per Lord Sutherland and p 536A, per Lord Johnston). But there was authority pre-dating 1959 which took the same approach to safety where there was such a qualification: see *Sheppey v Matthew T Shaw & Co Ltd* and *Trott v W E Smith (Erectors) Ltd* (para 65 above). The force of the point depends in any event upon the effect of the qualification. In *Mains* it was contemplated that the qualification might enable a defender to "say it was not reasonably practicable to make this place safe, because this particular mishap was not reasonably foreseeable" (p 527C-D, per Lord Sutherland) and that "The unforeseeable accident occurring in an unforeseeable way may well give the defenders a defence under the qualification" (p 637E, per Lord Johnston). Likewise, in the present case the Court of Appeal considered "as a matter of common sense" that "if, the employer does not know of the risk and cannot reasonably have been expected to know of it, it cannot be reasonably practicable for him to take any steps at all" (paras 83 and 91). On that basis, foresight can be very relevant under section 29(1). But, if this is so, then section 29(1) is to that extent merely shifting the onus of proof, which weakens the argument that it must be seen as departing substantially from conceptions of common law negligence.

80. In summary, safety must, in my view, be judged according to the general knowledge and standards of the times. The onus is on the employee to show that the workplace was unsafe in this basic sense.

(iv) Reasonably practicable

81. Since it took the view that safety is absolute and unchanging, the Court of Appeal had to consider whether the qualification "so far as is reasonably practicable" enabled the employers to exonerate themselves by showing that reasonable employers would not have considered that there was cause to reduce noise exposure in the workplace below 90dB(A). The Court of Appeal held that the qualification gave no scope for such a defence. It said (para 89):

> "Under the statute, the employer must first consider whether the employee's place of work is safe. If the place of work is not safe (even though the danger is not of grave injury or the risk very likely to occur) the employer's duty is to do what is reasonably practicable to eliminate it. Thus, once any risk has been identified, the approach must be to ask whether it is practicable to eliminate it and then, if it is, to consider whether, in the light of the quantum of the risk and the cost and difficulty of the steps to be taken to eliminate it, the employer can show that the cost and difficulty of the steps substantially outweigh the quantum of risk involved. I cannot see how or where the concept of an acceptable risk comes into the equation or balancing exercise. I cannot see why the fact that a

> responsible or official body has suggested that a particular level of risk is 'acceptable' should be relevant to what is reasonably practicable. In that respect, it appears to me that there is a significant difference between common law liability where a risk might reasonably be regarded as acceptable and statutory liability where the duty is to avoid *any* risk within the limits of reasonable practicability."

Smith LJ reiterated the point at the end of para 100, when rejecting the relevance of the Code of Practice to the question whether it was reasonably practicable to provide protection.

82. In the light of my conclusion that safety is a relative concept, the correctness of these passages does not strictly arise for consideration in this case. Had it arisen, I would have regarded the qualification as wide enough to allow current general knowledge and standards to be taken into account. Even the Court of Appeal in its formulation acknowledged the quantum of risk involved as material in the balancing exercise. But this can only mean that some degree of risk may be acceptable, and what degree can only depend on current standards. The criteria relevant to reasonable practicability must on any view very largely reflect the criteria relevant to satisfaction of the common law duty to take care. Both require consideration of the nature, gravity and imminence of the risk and its consequences, as well as of the nature and proportionality of the steps by which it might be addressed, and a balancing of the one against the other. Respectable general practice is no more than a factor, having more or less weight according to the circumstances, which may, on any view at common law, guide the court when performing this balancing exercise: see Swanwick and Mustill JJ's statements of principle, set out earlier in this judgment, and also *Charlesworth on Negligence* (12th ed) (2010), chapter 7, *The Standard of Care*, both generally and especially at para 7.38. It would be strange if the Court of Appeal was right in suggesting that, under the statutory formulation, this one factor is irrelevant, when the whole aim of the balancing exercise must, in reality, be to identify what is or is not acceptable at a particular time.

83. That the qualification "so far as may be reasonably practicable" may, if necessary, receive a broad interpretation is also indicated by the reasoning of the House in *Marshall v Gotham Co Ltd* [1954] AC 360. Under the Metalliferous Mines General Regulations 1938 (SR & O No 630) the roof and sides of every travelling road in a mine were required to be made secure. An employee was killed by a fall of roof, due to the presence of an unusual geological condition known as "slickenside", which there was no known means of detecting prior to a fall. It was argued that the mine-owner could have propped all roofs, and that "reasonably practicable" meant no more than "practicable" (p 364). The argument was rejected. Lord Oaksey at p 370 agreed with Jenkins LJ's statement, [1953] 1 WB 167, 179,

that what "is 'reasonably practicable' in this context is no more nor less than what is capable of being done to make roofs and sides secure within the limits of what it is reasonable to do; and it cannot be reasonable to do for this purpose anything more than that which it appears necessary and sufficient to do according to the best assessment of what is necessary and sufficient that can be made at the relevant time, that is, in the present instance a point of time immediately prior to the accident". Lord Reid at p 373 said that "if a precaution is practicable it must be taken unless in the whole circumstances that would be unreasonable" and took into account that the danger was a very rare one, that the trouble and expense involved in the use of the precautions, while not prohibitive, would have been considerable, that the precautions would not have afforded anything like complete protection against the danger, and that their adoption would have had the disadvantage of giving a false sense of security. Lord Keith considered at p 378 that there was "no general rule or test that can safely be relied on for measuring the discharge of such a duty", but that he "could not, as at present advised, accept … that the measure of an employer's liability can satisfactorily be determined by having regard solely to the proportion which the risk to be apprehended bears to the sacrifice in money, time or trouble involved in meeting the risk". Lord Tucker (with whom Lord Cohen agreed at p 377) said at pp 374-375 "that the word 'secure' does not involve security from the effects of earthquake or an atom bomb", but added that "it must include security from all the known geological hazards inherent in mining operations". At p 376 he echoed the list of factors which Lord Reid had identified in support of his conclusion that the precautions were not reasonably practicable.

84. A further aspect of para 84 in Smith LJ's judgment is the suggestion that "there must be at least a substantial disproportion" before the desirability of taking precautions can be outweighed by other considerations. This theme was developed in paras 82 to 84 of her judgment, on the basis of dicta in two cases prior to *Marshall v Gotham*. But it represents, in my view, an unjustified gloss on statutory wording which requires the employer simply to show that he did all that was reasonably practicable.

85. In deciding the appeal in favour of the respondent, the Court of Appeal relied upon HHJ Inglis's estimation of the quantum of risk below 90dB(A). HHJ Inglis said that

> "the description given to the risk to hearing of exposure below 85dB(A) … as 'minimal' is one that I accept and adopt. Above 85dB(A) the risk accelerates up to 90dB(A). In the high 80s, given long enough exposure, significant hearing loss may be expected in at least a substantial minority of individuals."

86. On that basis, Smith LJ said that, assuming (as she did) that the employers well knew that some of their workforce stayed in their employment over many years, they would, if they had asked a suitably qualified expert, have received advice conveying to them that a substantial minority of their workforce in the relevant departments were likely to suffer significant hearing loss, and could not then have hoped "to establish that the burden of providing ear protectors was substantially disproportionate to the quantum of risk to their employees" (para 98). Advice of this nature as to the quantum of the risk should have been received by late 1976 or early 1977 (para 101). To this, Smith LJ added six to nine months, for reasons already discussed, putting Quantum in breach of its statutory duty under section 29(1) from 1 January 1978.

87. Neither Quantum nor any other of the employers before the court exposed their workforce to noise levels in the "high 80s". The exposure found was in the case of Mrs Baker to levels of 86dB(A). As I have already stated, every 3dB(A) represents a doubling of the sound pressure level of the energy involved in the noise, even though it will not be appreciated as such by the hearer. More importantly, the approach taken by the Court of Appeal requires employers to take expert advice and to identify the quantum of risk in circumstances in which current standards and thinking did not expect any such steps. And if risks which are not currently regarded by responsible employers as calling for any action are required to be addressed, then, despite Smith LJ's references to the balancing of the quantum of risk against other factors, any employer who was or should have been aware of any risk at all greater than de minimis would be obliged to address it unless the trouble and cost involved were prohibitive.

88. This is highlighted by consideration of the arguments which can be made if one has regard simply to the statistical tables in BS 5330: 1976 upon which the respondent and the Court of Appeal have relied to show the risk attaching at levels of exposure between 85 and 90dB(A) lepd: see para 31 above. The respondent, as I understand, accepts that the logic of her case is that the risks below 85dB(A) cannot and should not have been regarded as immaterial. But this highlights how independent her case on section 29(1) is of contemporary standards of behaviour or thought. Only since 2005 have employers been obliged to require ear protectors to be worn by workers exposed to 85dB(A) and obliged to make them available on request to workers exposed to 80dB(A) (see para 14 of the Court of Appeal's judgment, quoted in para 15, above).

89. There is nothing in the history of section 29(1) or the mischief to which it was addressed to suggest that the legislature in 1959 or 1961 intended in this way to detach the penal liability which it then introduced in respect of the workplace from the ordinary understanding of reasonable employers. Contrary to the Court of Appeal's view, I consider that HHJ Inglis was correct in the approach he took to section 29(1), which followed that taken by Rose J in *Fazakerley*.

Conclusion

90. I would allow the appellants' appeals both at common law and under section 29(1). At common law, Quantum, and other employers in a similar position such as Guy Warwick, were not in breach of their duty of care or of their duty under section 29(1) in not implementing measures to protect their employees in respect of noise exposure at levels below 90dB(A) prior to 1 January 1990. As regards Meridian and Pretty Polly, in reflection of the common ground between Lord Dyson, Lord Saville and myself (paragraphs 25 and 43 above), the appeal will be allowed by restoring the judge's decision that they were in breach of duty in not having implemented such measures as from 1 January 1985.

APPENDIX

(para 18)

This Appendix indicates the factual position as found by the judge in relation to each employer.

Meridian (Courtaulds)

1. Taking the Courtaulds group of which Meridian was part, the judge found that the group had spinning and weaving divisions with high noise levels, that in the early 1980s the issue of noise began to be widely discussed, that claims for industrial deafness were emerging by 1983 and at the end of 1982 a Dr Cooper was asked to form and chair a noise committee. This committee met on 17 March 1983, and considered a paper indicating that a number of other countries had set a maximum exposure level of 85dB(A)lepd. It set companies in the division the task of surveying noise levels in all the factories. Also in the first half of 1983, Courtaulds' legal department and medical officer circulated a memorandum, containing this passage:

> "It has been suggested that some impairment may be caused by noise levels in the range of 85-90dB(A) .... We strongly recommend that hearing protectors be provided for all those who may be exposed to noise within the range 85-90dB(A)leq."

2. Factory surveys were completed by the committee meeting in March 1984. They identified areas above 90dB(A), as well as between 85dB(A) and 90dB(A), and in relation to the latter a 75% aim of acceptance of hearing protection by mid-1985 was suggested. At a further meeting in October 1984 the difficulties of obtaining compliance without Code of Practice backing were discussed, but the target was increased to 80% by the end of 1985, and the need for information, instruction and encouragement was recognised. By the meeting of 12 March 1986, Directive 86/188/EEC was imminent, and the committee noted that their policies already complied with the directive. The evidence showed that "the drivers for the activity from the early 1980s were proposed legislation, and the rising incidence of claims". Courtaulds were active in the debate stimulated by the consultation in 1981 and in opposing on economic and competition grounds the European proposal for legislation from 1982 (judgment, para 53). The judge also said that Courtaulds "had the resources to look beyond the 1972 Guidelines and reach their own conclusion about the nature and extent of the risks posed to the hearing of their employees exposed below 90dB(A)", but

> "56 … nobody actually considered … or sought to answer the question 'What are the actual risks to members of the workforce exposed to different levels of noise?' The 90dB(A) standard from 1972 was considered to be the standard that the law and good practice required. There was a clear awareness by the early 1980s that exposure to levels of noise between 85 and 90dB(A) could be expected to damage the hearing of some workers to the extent that action was desirable at those levels. No large company who responded to the consultation document or read the background document and was aware of the EEC proposals in 1982, and one that then took part in the debates trying to fend off compulsory protection at 85dB(A) on economic grounds, but not on grounds that such levels of exposure were not harmful, could be said to be ignorant of the facts by the beginning of 1983 at the latest."

Pretty Polly

3. This company disclosed a substantial quantity of material consisting of or based on documents in the public domain. In 1975 a Factory Inspector found noise levels of 89dB(A) and did not recommend any steps. Further, as the judge found (para 63):

> "The internal documents include a Guide to Preparing a Noise Control Policy from Midland Insurance, undated but probably from the late 1970s or early 1980s, in which it is said that [on] exposure to 90dB(A)lepd over a long period there is a possibility of damage to hearing, so that adequate steps should be taken to prevent this; also that a noise reduction programme should aim at reducing noise to 84dB(A) or less if practicable; a Commercial Union Risk Management Ltd paper from 1977 saying that 'research has shown that few industrial workers will suffer serious hearing loss if the intensity and duration of exposure is controlled to allow a maximum' of 90db(A) and, later, that 'the exposure standard of [90dB(A) lepd] is based on the prediction that not more than 1 % of those exposed to this level over a 30-year working lifetime will suffer social handicap as a result. Levels should thus be reduced whenever possible and 90dB(A) regarded as a ceiling rather than a safe level'.

4. In December 1982 Pretty Polly's work studies department produced a memorandum, probably written by a Mr John Butler, later manager of the department, stating that 90dB(A) was the maximum level, that noise at that level involved accepting a certain risk of hearing damage and that:

> "if we as a company feel that we require a zero risk of hearing damage for our employees, then no person should be exposed to a noise level of more than 80dB(A) for an eight hour day."

There followed a table of percentage risk of hearing damage (such damage not being defined) showing 0% at 80dB(A), and at 85dB(A) 1, 3, 5, 6, 7, 8, 9 and 10% for 5, 10, 15, 20, 25, 30, 35 and 40 years of exposure respectively. The percentages for the same periods at 90dB(A) were said to be 4, 10, 14, 16, 16, 18, 20 and 21 %. These figures came in fact from ISO: 1999 of 1975, and some, but not all of this information about low level exposure, was in the 1981 consultative document.

5. In 1985 Mr Butler distributed an assessment with essentially the same table, noting that with one exception all machinery areas in the company were in excess of 85dB(A) and that:

> "Even at this level we are accepting a certain risk of damage for our employees. If a zero risk of hearing damage is required, then no employee should be exposed to a noise level of more than 80dB(A) for more than eight hours a day."

The judge found (para 66) that:

> "There is no evidence that anyone at Pretty Polly turned their mind towards any evaluation of the risks below 90dB(A) before 1982. It is not really likely that they did so. It is plain from Mr Butler's documents that by that year he had done so. Indeed, it is unlikely that a company of that size where there had been some collection of materials, and where they cannot have been unaware of the EEC proposals and the very public debate that followed, could not have known that there was a real case to be made that exposure below 90dB(A) could cause levels of hearing damage that should be guarded against. I would put actual awareness of the nature of the real risk below 90dB(A), as with Courtaulds, as having arisen by the beginning of 1983."

Taymil (now Quantum) and its subsidiaries

6. In relation to the subsidiaries of Taymil, which included Mrs Baker's employers, the judge found:

“60. The factories in the group seem to have run largely independently, with factory management being responsible for health and safety, reflecting the origins of each factory in a separate business. There was no central health and safety function. Mr Jones said that he thought that in 1977 or thereabouts a Health and Safety policy document had been produced. He said it would probably have been destroyed ‘when the company folded’. There is no reason to think that such a policy, if it did in fact exist, would on noise have done anything but refer to the limit of 90dB(A). The knitting shops were recognised as being the areas with possibly dangerous levels of noise, not making up areas. Of the documents referred to the first is a noise survey and accompanying documents done for Huthwaite Avenue by Midland Insurance in June 1983. Mr Watson had discussed the conclusions of it with Midland Insurance, as appears on the face of the document, though he said in evidence that he could not remember it. The survey refers to the 90dB(A) limit and suggests that all areas in the survey above 87dB(A) should be areas where ear protection is worn until the noise is reduced by engineering methods. A number of areas were identified as having noise over that level. Proper training and instruction of staff is advised; and appended is a guide to preparing a noise control policy, in which it is suggested that any noise reduction programme should aim at reducing noise to 84dB(A) or less if practicable. There is a noise survey of Botany Avenue by Mr Graham Allin, an engineer working to Mr Gage in August 1984 in which Mr Allin refers to company policy taking 85dB(A) as the exposure threshold level. I am satisfied that there was no such policy. Mr Gage, who was a good witness was quite clear about that, and explained how Mr Allin may have got that idea from Mr Gage's view about a margin of safety below 90dB(A) so as to ensure the 90dB(A) level was achieved. Moreover, in a draft survey of the Ollerton factory written after June 1984 when the EEC proposals were changed there is no mention of such a policy. The quality of their evidence was not as good as that of Mr Gage, but both Mr Watson and Mr Ivan Jones said that the limit to be worked to was 90dB(A). There is no evidence of any steps towards protection being taken in the Nottingham Manufacturing years aimed at conservation over 85dB(A). Mr Watson said in evidence that he was aware of the EEC proposal in 1982 to reduce the exposure level to 85dB(A). He was aware of the existence of the debate about that proposal, from discussions with insurers: ‘It was viewed with some scepticism, I think. Coats was a large organisation. By the time they came on the scene attention, if any, must have been focused on the EEC proposals that led to the 1989 regulations.

> 61. There is therefore no evidence that anyone in Nottingham Manufacturing or its subsidiaries with which this case is concerned turned their mind towards the level of risk about possible harm below 90dB(A)leq, except that Mr Watson was aware after 1982 of a debate going on about what levels would ultimately be imposed, and by the summer of 1984 it was known that though the compulsory level would remain at 90, some measures, possibly audiometry, would be imposed at 85dB(A). The 1983 Midland Insurance document is an important document, with its plain implication that the 90dB(A) Code of Practice level did not provide protection to everyone, and that a noise conservation policy should do better, but it does not provide the information that means that management at Nottingham Manufacturing were in a position of knowledge and understanding that set them apart from what I take to be the understanding of the great majority of employers, that 90dB(A)lepd was the official limit that had to be worked to. I do not think it is shown that Nottingham Manufacturing had a greater than average degree of knowledge."

Guy Warwick

7. The judge said that, by comparison with other defendants, they were a very small company, engaged in making up operations, with at their height four factories and under 400 employees, and (para 68) that

> "There is no evidence that anyone at Guy Warwick knew about the 1972 Code of Practice, or even about the Noise at Work Regulations 1989, which were in force for the last two years of the company's life. Mr Kettle was involved in health and safety and set up the health and safety committee. There were committee meetings at which he said in his statement the question of noise was never raised. The factory inspectors who came round periodically and the insurance representatives never raised it. No surveys were ever done. 'In my opinion' said Mr Kettle, 'the industry was not renowned for excessive noise'. Whether, on the facts of actual noise to which Mrs Hooley was exposed, Guy Warwick were in breach of any duty to her, has to be judged on the basis that they had no actual knowledge of the relevance of noise to their operation."

LORD DYSON

Common law negligence

The decisions below

91. The history of investigation and awareness of the risks of occupational exposure to noise is fully set out by Lord Mance at para 15 of his judgment. On the basis of this material, the judge applied the well known test enunciated by Swanwick J in *Stokes v Guest, Keen and Nettleford (Bolts and Nuts) Ltd* [1968] 1 WLR 1776, and held at para 87 that complying with 90dB(A) lepd as the highest acceptable limit met the standards of the reasonable and prudent employer during the 1970s and 1980s "certainly until the time when the terms of the 1986 directive became generally known in the consultative document of 1987". He concluded, therefore, that the average employer was not in breach of its common law duty of care to its employees in failing to provide ear protectors before about the beginning of 1990. At para 88, however, he held that by the beginning of 1983 Courtaulds and Pretty Polly "had sufficient understanding of the risks to hearing below 90dB(A) lepd to require them to take action". He then considered what was a reasonable period to allow for these two companies to take action and held that they should have done so by the beginning of 1985. Accordingly, from that date they were in breach of duty to employees who suffered damage through exposure at 85dB(A) lepd and above without having the opportunity of using hearing protection. He must also have held that the other (average) employer defendants were entitled to a period of about two years to take action. Although the judge gave no precise dates, it is for this reason that he dismissed the claim by Mrs Baker.

92. Smith LJ (with whom Sedley and Jacob LJJ agreed) said at para 105 that the judge's conclusion at para 87 of his judgment "cannot be faulted". She said that she would uphold his view that there was no breach of duty at common law "during the period for which a responsible body of opinion regarded it as 'acceptable' to expose employees to noise in the 85-89dB(A) lepd range". For the employer with the ordinary or average degree of knowledge, the judge's conclusion that this period came to an end in 1987 following the publication of the consultation paper on the 1986 draft directive was a reasonable conclusion. She differed from the judge only in that she considered that the average employer should have needed no more than six to nine months from the date of the publication of the consultation paper. For that reason, in respect of the average employer she fixed the date for breach of the common law duty of care at January 1988. As for Courtaulds and Pretty Polly, she upheld the judge's conclusion that

these companies had the requisite knowledge in early 1983. But, differing from the judge, she allowed them only six to nine months to provide ear protection.

93. Finally, at para 109 she explained why Quantum should not be treated as an average employer and why its position should be assimilated to that of Courtaulds and Pretty Polly. The judge had found that the group insurance and risk manager of Quantum admitted that he was aware of the first draft EEC directive in 1982. Having reviewed the evidence, the judge said at para 61 that the company management were not "in a position of knowledge and understanding that set them apart from what I take to be the understanding of the great majority of employers that 90dB(A) lepd was the official limit that had to be worked to". Smith LJ accepted the submission of Mr Hendy QC that, since there was evidence that Quantum was aware of the first draft directive, it was irrational to treat Quantum differently from Courtaulds and Pretty Polly, who also had such knowledge.

Is compliance with the 1972 Code of Practice a defence for the average employer?

94. On this appeal, Mr Hendy challenges the decision of the judge (upheld by the Court of Appeal) that the 1972 Code of Practice constituted an acceptable standard for average employers to adhere to until the late 1980s. I shall deal first with this challenge before coming to the question whether there was any basis for the judge to treat Courtaulds and Pretty Polly (and the Court of Appeal additionally to treat Quantum) differently.

95. I agree for the reasons given by Lord Mance at paras 28 to 37 of his judgment that there is no basis for interfering with the judge's finding at para 87 that until the late 1980s the Code of Practice set the standard for the reasonable and prudent employer without specialist knowledge.

96. The avowed purpose of the Code was to set standards to protect loss of hearing due to noise at work. The Foreword by the Rt Hon Robert Carr MP, Secretary of State for Employment, states that until the pioneering work of Professor Burns and Dr Robinson (both members of the committee that prepared the Code of Practice) "we lacked the necessary scientific knowledge of the precise levels of noise, and the duration of exposure to them, which can cause damage". Mr Carr wrote that he regarded the publication of the Code as the first important step in the prevention of loss of hearing due to noise at work. "It should be considered as a blueprint for action".

97. Section 1.1.2 stated: "The Code sets out recommended limits to noise exposure." It went on to say:

> "It should be noted that, on account of the large inherent variations of susceptibility between individuals, these limitations are not in themselves guaranteed to remove all risk of noise-induced hearing loss."

98. At section 4.3.1, the Code defines the limit in these terms: "If exposure is continued for eight hours in any one day, and is to a reasonably steady sound, the sound level should not exceed 90dB(A)". It is this limit which the Code "specifies [as] a limit for exposure to noise" (section 2.1.1); which if not achieved triggered the obligation to provide ear protectors and ensure their use (sections 3.1.2 and 7.1.1); which should be regarded as "maximum acceptable levels and not as desirable levels" (section 4.1.1); and which if it was considered that it may be exceeded dictated the obligation to carry out a survey (section 5.1.1).

99. On a fair reading of the Code, this blueprint for action provided that, although it was desirable to reduce levels where reasonably practicable to below the 90dB(A) level, continuous exposure for eight hours in any one day to a reasonably steady sound below 90dB(A) was acceptable and did not require the provision of ear protectors. It was made clear that, having regard to the large inherent variations of susceptibility between individuals, exposure below 90dB(A) could not *guarantee* to remove all risk of noise-induced hearing loss. But the clear message of the document, based on the latest scientific knowledge, was that ear protectors were not required if the noise levels were below 90dB(A) and that at levels below 90dB(A) the risk to particularly susceptible people was sufficiently small, both in terms of the numbers who might be affected and the seriousness of any damage that might result, to be acceptable.

100. That is how I would interpret the document. That is also how the document was interpreted by those in the industry. Lord Mance has referred at paras 32 and 34 of his judgment to the evidence on this point summarised by the judge at paras 46 to 48 of his judgment and his findings at para 48. In summary, the judge found that the 90dB(A) limit was regarded by everyone in the industry, the Health and Safety Executive and factory inspectors as "the touchstone of reasonable standards that should be attained". This finding was supported by the notes published by the Wolfson Unit for Noise and Vibration Control in the University of Southampton in 1976. As the judge said, with the publication of BS 5330 in 1976, there was information available which, if researched, would give an indication of the level of risk below 90dB(A). But in the light of the terms of the Code itself and all the evidence summarised at paras 46 to 48, I agree with the Court of Appeal that the judge was entitled to hold that an average reasonable and prudent employer was not in breach of its duty of care to its employees in simply relying on the 90dB(A) limit as an acceptable limit.

101. There is no rule of law that a relevant code of practice or other official or regulatory instrument necessarily sets the standard of care for the purpose of the tort of negligence. The classic statements by Swanwick J in *Stokes* and Mustill J in *Thompson v Smiths Shiprepairers (North Shields) Ltd* [1984] QB 405 which have been quoted by Lord Mance at paras 9 and 10 of his judgment remain good law. What they say about the relevance of the reasonable and prudent employer following a "recognised and general practice" applies equally to following a code of practice which sets out practice that is officially required or recommended. Thus to follow a relevant code of practice or regulatory instrument will often afford a defence to a claim in negligence. But there are circumstances where it does not do so. For example, it may be shown that the code of practice or regulatory instrument is compromised because the standards that it requires have been lowered as a result of heavy lobbying by interested parties; or because it covers a field in which apathy and fatalism has prevailed amongst workers, trade unions, employers and legislators (see per Mustill J in *Thompson* at pp 419-420); or because the instrument has failed to keep abreast of the latest technology and scientific understanding. But no such circumstances exist here. The Code was the result of careful work by an expert committee. As the judge said, at para 87, the guidance as to the maximum acceptable level was "official and clear". He was entitled to accept the evidence which led him to conclude that it remained the "touchstone of reasonable standards" for the average reasonable and prudent employer at least until the publication of the consultation paper on the 1986 draft Directive (para 48).

Remaining questions

102. There remain three questions in relation to the issue of common law negligence. First, was the judge right to treat Courtaulds and Pretty Polly as different from the average employer? Secondly, was the Court of Appeal right to hold that employers should have provided ear protectors within six to nine months of the publication in 1987 of the consultation paper on the draft second EEC Directive (and not two years as held by the judge)? Thirdly, was the Court of Appeal right to hold that Quantum was not an average employer, but had particular knowledge, which assimilated its position to that of Courtaulds and Pretty Polly as it was found by the judge to be?

103. As regards the first question, the judge held that by the beginning of 1983 Courtaulds and Pretty Polly had an understanding of the risk that some workers would suffer damage at exposure between 85 and 90dB(A)lepd which led him to distinguish their position from that of the average prudent employer. Lord Mance (paras 21 to 25) says that neither Courtaulds nor Pretty Polly had acquired any new knowledge by this time. All that had happened was that they had formed a different view from that generally accepted about what precautions to take. He

says that the failure to give effect to that different view does not amount to a breach of the duty of care.

104. I would not interfere with the judge's assessment on this point. The position of the average employer was that, until about 1987, it knew or should have known that there was a risk at below 90dB(A), but that it was officially regarded as so small as to be acceptable. But as the judge said at para 56 in relation to Courtaulds, that company "had the resources to look beyond the 1972 Guidelines and reach their own conclusion about the nature and extent of the risks posed to the hearing of their employees exposed below 90dB(A)". It is true that they did not seek to assess the actual risks to members of the workforce exposed to different levels of noise. But the judge found that the company had a "clear awareness" by the early 1980s that exposure to noise between 85 and 90dB(A) "could be expected to damage the hearing of some workers to the extent that action was desirable at those levels". So too as regards Pretty Polly. Thus, on the basis of their own research into the problem and the discussion generated in the industry by the EEC proposals, by early 1983 large employers such as Courtaulds and Pretty Polly had come to the conclusion that the 90 limit was no longer acceptable. Unlike Lord Mance, I would not characterise the decision of the two companies that some action should probably be taken as a display of "greater than average social awareness". As responsible employers, they understood that they owed a duty of care to their employees and were keeping the content of that duty under review. But even if the decision that action was desirable was a display of social awareness, I do not see how that would necessarily afford a defence. On the finding by the judge, their appreciation that the Code limit was no longer acceptable was sufficient to found liability. I note, in any event, that Mustill J in *Thompson* said that changes in social awareness "may transfer the risk into the category against which the employer can and should take care" (pp 415-416).

105. As regards the second question, in my view the Court of Appeal was not entitled to interfere with the judge's assessment of what was a reasonable lead-in time for the average employer. A period of two years from the publication of the consultation paper takes one to the end of 1989, which was effectively the date when the 1989 Regulations came into force. The judge was entitled to hold that it was reasonable not to require the average employer to implement protective measures before the impending regulations came into force.

106. As regards the third question, the judge carefully considered all the evidence about the knowledge and understanding of Quantum at paras 57 to 61 of his judgment. He concluded that it did not show that the management "were in a position of knowledge and understanding that set them apart from what I take to be the understanding of the great majority of employers, that 90dB(A) lepd was the official limit that had to be worked to." In my view, this assessment of the facts

was reasonably open to the judge. The Court of Appeal should not have interfered with it.

Section 29(1) of the Factories Act 1961

107. I agree with and do not wish to add anything to what Lord Mance has said on the issue of whether section 29 applies to operations carried out within the place of work. I also agree that the section applies to noise. Like Lord Mance, I recognise the force of the arguments to the contrary. Noise was clearly not in the contemplation of Parliament when section 29 or its predecessors were enacted. But the language of section 29(1) ("every such place shall, so far as is reasonably practicable, be made and kept safe for any person working there") is general and "always speaking". Thus it can accommodate working methods and technological developments that were not foreseeable (and attitudes to safety that were not held) at the time when the statute was enacted. I would hold that section 29 applies to noise for the simple reason that excessive noise can cause injury by damaging a person's hearing thereby rendering a place of work unsafe for those who are working there. For my part, I would reach this conclusion regardless of whether section 29(1) imposes absolute liability in the sense to which Lord Mance refers at para 61.

Meaning of "safe"

108. The judge held that what was "safe" within the meaning of section 29(1) was not to be judged objectively, but was "really a jury question, to be answered in the light of all the circumstances prevailing at the time, including what might reasonably have been foreseen by an employer" (para 97). And again at para 99: "as contemplated by Rose J in *Taylor v Fazakerley*, the standard of safety in the section is governed by the general standard which ought reasonably to have been adopted by employers at the relevant time." Having reviewed the facts in detail, he concluded that the standard of safety was determined by the 1972 Code until the coming into force of the Noise at Work Regulations 1989 and that, judged by the standard of the 1972 Code, Mrs Baker's place of work was safe. Having reached this conclusion, he did not go on to consider whether her employers had discharged the burden of proving that they had done all that was reasonably practicable to make and keep the place safe for any person working there.

109. Smith LJ agreed with and applied the Court of Appeal decision in *Larner v British Steel plc* [1993] ICR 551 (which was followed by the Inner House of the Court of Session in Scotland in *Mains v Uniroyal Englebert Tyres Ltd* [1995] IRLR 544) and held (para 76) that the safety of a place of work within the meaning

of section 29 was "to be judged objectively without reference to reasonable foresight of injury".

110. She said that what is objectively safe cannot change with time. On the evidence before the judge, she held that the places of work where the ambient noise levels were 85dB(A) lepd or above were not safe (para 78). In the alternative, if reasonable foresight was relevant, she said that by the early 1970s any employer who kept abreast of developing knowledge would have known that prolonged exposure to 85dB(A) lepd was harmful to some people (para 79). On that basis, by the early 1970s there would have been liability for breach of section 29, subject to the reasonable practicability defence.

111. Like Lord Mance, I prefer the approach of the judge, with the qualification that what is "safe" is an objective question in the sense that safety must be judged by reference to what might *reasonably* be foreseen by a reasonable and prudent employer. The concept of what is safe is not, however, absolute. As Lord Nicholls and Lord Hobhouse said in *R (Junttan Oy) v Bristol Magistrates' Court* [2003] UKHL 55, [2003] ICR 1475, safety is a relative concept. People can legitimately hold different opinions as to what is safe. Opinions as to what is safe may vary over time as, with developing knowledge, changes occur to the standards that are reasonably expected to be followed. I do not, therefore, agree with Smith LJ (para 78) that what is objectively safe cannot change with time. Standards of safety are influenced by the opinion of the reasonable person and foreseeability of risk plays a part in the forming of that opinion. If reasonable foreseeability is not imported into the concept of safety, then unless the Court of Appeal are right in holding that it is relevant to reasonable practicability, section 29(1) imposes an obligation on employers to guard against dangers of which they cannot reasonably be aware (in so far as it is reasonably practicable to do so). Breach of that obligation exposes the employer to potential criminal liability: see section 155 of the 1961 Act. That is an unreasonable interpretation to place on the statute, which I would not adopt unless compelled to do so by clear words, whether express or necessarily to be implied. In my view, there are no such words.

112. As Lord Mance points out, there are two strands of authority on the meaning of "safe" in section 29(1). Before I come to these, I should refer to section 14(1) of the 1961 Act which provides:

> "(1) Every dangerous part of any machinery….shall be securely fenced unless it is in such a position or of such construction as to be as safe to every person employed or working on the premises as it would be if securely fenced".

It will be seen that section 14(1) does not include a reasonable practicability qualification.

113. There is a line of authority to the effect that reasonable foreseeability is a component of the meaning of "dangerous" in section 14(1) and its predecessors: see, for example, cases such as *Hindle v Birtwhistle* [1897] 1 QB 192, *John Summers & Sons Ltd v Frost* [1955] AC 740 and *Close v Steel Company of Wales Ltd* [1962] AC 367. In *Close,* Lord Denning referred with approval to *Hindle,* a case involving a shuttle which flew out and injured a weaver. He said at pp 380-381:

> "The Divisional Court held that it was capable of being a dangerous part of the machinery. It depended on the frequency with which shuttles were likely to fly out. If it was so frequent as to be a reasonably foreseeable cause of injury, it was dangerous. But if it was so rare as to be a minimal risk, it was not dangerous. Wills J gave a definition which has been repeatedly approved: 'It seems to me that machinery or parts of machinery is and are dangerous if in the ordinary course of human affairs danger may be reasonably anticipated from the use of them without protection' ".

114. Lord Denning added:

> "My Lords, anyone who has practised in the Queen's Bench Division knows that the case of *Hindle v Birtwhistle* has been cited very, very many times. Du Parcq LJ vouched for it up to 1940 in *Stimpson v Standard Telephones and Cables Ltd* [1940] 1 KB 342 and I can vouch for it since."

115. The first strand of authority on section 29(1) imports the concept of reasonable foreseeability into the meaning of "safe". Lord Mance has mentioned two of the cases at para 71 above. There are others including a number of Scottish cases and the unreported decision of Rose J in *Taylor v Fazakerley Engineering Co* (26 May 1989), which I mention only because he was a judge who had great experience of personal injury litigation.

116. The second strand includes the cases mentioned by Lord Mance at para 73. In *Larner v British Steel plc* [1993] ICR 551, Hirst LJ approved a passage in *Munkman, Employer's Liability*, 11th ed (1990) p 292, where the author expressed the view that "safe" was a simple English word and there was no reason why the safety of a place of work should not be decided as a pure question of fact. Hirst LJ

regretted the introduction of "the vague and uncertain notion of foreseeability". Peter Gibson J said that it was not unfair on employers to impose a strict duty, because the duty was qualified by the defence of reasonable practicability. To introduce the concept of reasonable foreseeability into the question of safety was effectively to equate the duty under the section with the duty at common law.

117. Mr Hendy QC seeks to uphold this reasoning. He submits that the word "safe" is a plain English word. It is not qualified. In this respect, it may be contrasted with, for example, reg 4 of the Provision and Use of Work Equipment Regulations 1998 by which the duty to ensure that work equipment is "suitable" for its purpose is conditioned by reg 4(4), which provides that the word "suitable" means "suitable in any respect which it is reasonably foreseeable will affect the health or safety of any person". Mr Hendy has referred to a number of decisions on other health and safety provisions in which the court held that the duty on the employer was absolute and did not import any element of reasonable foreseeability.

118. In my view, the meaning of section 14(1) is highly relevant. As a matter of ordinary English, the word "dangerous" is an antonym of "safe". The text of section 14(1) suggests that it is being so used in the subsection. The subsection provides that every dangerous part of any machinery shall be securely fenced unless "it is in such a position or of such construction as to be as *safe* to every person employed or working on the premises as it would be if securely fenced" (emphasis added). The contrast between "dangerous" and "safe" is striking. As I have said, the meaning of section 14(1) is long-established: there can be no liability for dangerous parts of machinery unless the danger is reasonably foreseeable. In these circumstances, it would be surprising if Parliament had intended to impose liability under section 29(1) for a danger (or lack of safety) which is not reasonably foreseeable.

119. The only justification for interpreting "safe" in section 29(1) as not importing the concept of reasonable foreseeability is that it is *unnecessary* to do so because reasonable foreseeability is imported into the reasonable practicability qualification. I accept that, if it is imported into the reasonable practicability qualification, there is no *need* to interpret "safe" as importing reasonable foreseeability in order to avoid an inexplicable mismatch between sections 14(1) and 29(1).

120. Smith LJ accepted (and Mr Hendy QC accepts) that reasonable foreseeability is relevant to reasonable practicability: "As a matter of common sense, if the employer does not know of the risk and cannot reasonably have been expected to know of it, it cannot be reasonably practicable for him to take any steps at all" (para 83). That was also the view of the courts in *Larner* and *Mains.*

121. But in my view, the foreseeability of a risk is distinct from the question whether it was "reasonably practicable" to avoid it. Diplock LJ explained the point in *Taylor v Coalite* at pp 319-320 in the passage quoted by Lord Mance at para 71 above. It is only *if* a risk is reasonably foreseeable and it was reasonably foreseeable that an injury would be caused that it becomes necessary to consider whether it was reasonably practicable to avert the risk. Thus, for the purpose of deciding the issue of reasonable practicability, it is *assumed* that the risk was reasonably foreseeable.

122. The importance of the section 14(1) line of cases is that they recognise that the mere fact that a risk of injury is foreseeable as a *possibility* is not necessarily sufficient to make the machinery "dangerous". It is dangerous only if the risk of injury is sufficiently likely to make it more than a minimal risk: see, for example, the passage in Lord Denning's judgment in *Close* which I have quoted at para 113 above. I would apply that approach in the present case. The 1972 Code specified a limit of 90dB(A)lepd. As the HSE report "Framing Noise Legislation" published in 1975 made clear, this noise limit "has widespread international acceptance, and although it does not eliminate all risk of hearing damage, we feel it continues to be the most practicable standard" (para 19). The Code itself stated that exposure below 90dB(A) lepd could not guarantee to remove all risk of noise-induced hearing loss. But the implication was that the risk was very small and acceptable in the view of the Government Department responsible for issues of health and safety and the experts who were advising them.

123. I would agree, however, that if the concept of reasonable foreseeability is not imported into "safe" in section 29(1), then it is imported into reasonable practicability for the reasons given by Smith LJ. This is the position for which Mr Hendy contends.

124. In agreement with the Court of Appeal in *Larner*, there is more than a hint in the reasoning of Smith LJ as to the meaning of "safe" in section 29(1) that it is influenced by the idea that it is necessary to interpret the subsection as imposing a greater obligation than would be imposed at common law. In this respect, at paras 59 and 60, she criticises Rose J in *Taylor v Fazakerley* for doing no more than "formulating the common law test". At para 67, she refers with approval to Peter Gibson J's statement in *Larner* that to introduce the concept of reasonable foreseeability into the question of safety was effectively to equate the duty under the section with the duty at common law. At para 70, she refers to a similar observation by Lord Sutherland in *Mains.* Finally, when discussing the issue of reasonable practicability at paras 87 to 89, she draws a distinction between section 29(1) and the common law. The critical passage is quoted by Lord Mance at para 81. She says that at common law a risk might be regarded as acceptable, whereas under the statute the duty is to avoid any risk within the limits of reasonable practicability. There is a similar passage at para 100 of her judgment.

125. I assume that the justification for saying that the statutory duty must differ from the common law duty is that the statutory provisions would otherwise be otiose. But there is no principle of law that a statutory obligation cannot be interpreted as being co-terminous with a common law duty. As Stephenson LJ said in *Bux v Slough Metals Ltd* [1973] 1 WLR 1358, 1369-1370: "The statutory obligation may exceed the duty at common law or it may fall short of it or it may equal it". Sometimes Parliament may decide that, in the interests of clarity and certainty, there is advantage in providing a detailed all-embracing set of rules. The merit in setting these out in a single authoritative document, such as a statute, is not undermined even if they do no more than reflect what the courts would be likely to decide when applying the common law. There are, in any event, two important respects in which section 29(1) clearly does not reflect the common law. First, if a defendant wishes to say that it was not reasonably practicable to make or keep a place of work safe, the burden is on him to do so; it is not on the claimant to prove that it *was* reasonably practicable. I accept that few cases of this kind are likely to be decided on an application of the burden of proof. Nevertheless, in this respect there is a legal difference between the statutory and common law positions. Secondly, the fact that breaches are offences is a very significant difference. The fact that, as we were told, there have been few (if any) prosecutions is immaterial. Parliament considered that a breach of section 29(1) was sufficiently serious to attract potential liability to criminal sanctions.

Were the places of work "safe"?

126. Safety must be judged by the understanding and standards of the times. Where these are set out in a clear and official publication such as a Code of Practice issued by a relevant government department based on the most up to date expert advice, they are likely to set the bounds of what risks are reasonably foreseeable and acceptable and what is reasonably to be expected of an employer. If the guidance given in such a publication becomes out of date and a reasonable and prudent employer becomes aware of this (or ought reasonably to do so), then it can no longer rely on the publication to meet an allegation that its place of work is no longer safe. And employers with special expertise fall into a special category, as the positions of Courtaulds and Pretty Polly demonstrate.

127. I see no reason to disturb the judge's conclusion on the issue of safety. He was entitled to conclude that the standard of safety was determined by the 1972 Code until the coming into force of the 1989 Regulations and that, judged by the standard of the 1972 Code, Mrs Baker's place of work was safe.

Reasonably practicable

128. In view of the conclusion I have reached on the meaning of "safe" the question of reasonable practicability does not arise. But as I have said, if reasonable foreseeability is not imported into the meaning of "safe", I would agree with the Court of Appeal that it is imported into reasonable practicability.

129. On this hypothesis, however, I do not agree with the Court of Appeal that the acceptability of risk is irrelevant to reasonable practicability. I would adopt what Lord Mance says at paras 82 and 83. Smith LJ refers to the "quantum of the risk" as being relevant to whether it is reasonably practicable to eliminate it. I agree. But if the quantum of the risk is relevant to that question, how can the fact that a Code of Practice says that a risk is acceptable not be relevant? As Smith LJ said, the classic exposition of reasonable practicability is to be found in *Edwards v National Coal Board* [1949] 1 KB 704. Tucker LJ said at p 710: "in every case it is the risk that has to be weighed against the measures necessary to eliminate the risk. The greater the risk, no doubt, the less will be the weight to be given to the factor of cost." If, to use the words of Smith LJ, a responsible or official body has suggested that a particular level of risk is "acceptable", that is likely to be cogent evidence that this level of risk is minimal and one that can reasonably be disregarded.

130. Smith LJ acknowledged that an official view as to the acceptability of a risk might well have a role to play in the determination of common law liability. Having said at paras 89 and 100 that it had no part to play in the determination of whether it was reasonably practicable to make a place of work safe, she acknowledged at para 101 (rightly in my view) that the 1972 Code was relevant to the employer's assessment of the quantum of the risk, although it was inadequate as an assessment tool.

131. In my view, the 1972 Code was plainly relevant to an employer's assessment of the risk. The central question is whether, and during what period, it was reasonable for an employer to rely on the 1972 Code for the assessment of the risk and whether in all the circumstances it was reasonable for an employer not to provide ear protectors. At para 101, Smith LJ gave her reasons for holding that by late 1976 or early 1977 the average-sized employer in the knitting industry could and should have been able to make an informed assessment of the quantum of risk arising from noise in the range of 85 to 90dB(A) lepd and that this assessment would have led the employer to the conclusion that ear protectors should be provided.

132. It is true that the judge did not deal with the issue of reasonable practicability since, on his view as to the meaning of "safe", it did not arise. But he did deal with the issue of the appreciation of risk by a reasonable employer when he addressed the issue of common law negligence: see paras 69 to 89. This section of his judgment must be considered against the background of his earlier findings of fact at paras 46-48 to which I have earlier made reference.

133. The critical paragraph in the judgment of the judge is para 87 which Lord Mance has set out at para 16. It can be seen that para 101 of the judgment of Smith LJ is at variance with para 87 of the judge's judgment. The judge said that the guidance given as to the maximum acceptable level by the 1972 Code was "official and clear". His assessment was that complying with the 90dB(A) lepd as the highest acceptable level was "meeting the standards of the reasonable and prudent employer during the 1970s and 1980s, certainly until the time when the terms of the 1986 Directive became generally known in the consultative document of 1987". They were not in breach of duty for not asking the question "who is at risk in my factory and how big is the risk?"

134. In my judgment, the Court of Appeal should not have interfered with this assessment of the standards of the reasonable and prudent employer during the 1970s and 1980s. For the purpose of the reasonable practicability issue, Smith LJ accepted that an employer was entitled to rely on the 1972 Code until the publication of BS 5330 in July 1976. She said that the significance of that document was that it now became possible for anyone with a modest degree of mathematical skill to assess the quantum of risk from noise in the range 85 to 90dB(A) lepd. But in expressing this view, Smith LJ must have overlooked paras 46 to 48 of the judge's judgment. In the light of that evidence (which was accepted by the judge), he was entitled to hold that a reasonable and prudent employer would not have sought advice from an acoustic engineer on the basis of BS 5330. All the evidence was that nobody used the tables to do the kind of calculation that Smith LJ said should have been carried out. The evidence was that the 90dB(A) lepd limit stated in the 1972 Code was regarded as the touchstone of reasonable standards at least until the mid-1980s. In my judgment, there was no basis for the Court of Appeal to interfere with that assessment either in relation to the issue of reasonable practicability or the standard to be expected of the reasonable prudent employer.

Conclusion

135. It follows that I would allow the appeals both at common law and on the section 29(1) issue. For the reasons that I have given, I agree with the conclusions reached by Judge Inglis (to whose judgment I would pay tribute).

LORD SAVILLE

136. For the reasons given by Lord Mance and Lord Dyson, I would allow this appeal to the extent proposed by those Justices. To my mind the contrary views depend to a significant degree on hindsight and consequently place an undue burden on employers.

LORD KERR

Liability at common law

137. The report of the Committee under the chairmanship of Sir Alan Wilson on the Problem of Noise ("the Wilson Committee") of March 1963 was presented to Parliament in July 1963. It contained the following observations:

> "508 … Permanent reductions in sensitivity of hearing can be caused by damage to the inner ear, resulting from exposure over a considerable period to certain types of noise. The existence of this damage, which is irreversible, has been demonstrated in people who work in noisy industrial environments. …
>
> 509. Though the existence of these temporary and permanent reductions is well established, as this chapter shows, our knowledge is very inadequate. …
>
> 518. Different individuals vary considerably in the amount of hearing loss produced in them by a given noise exposure.
>
> 521. …
>
> (b) the British Medical Association stated in their evidence that they believed 'that there is general acceptance of the view that working conditions involving continuous exposure throughout working hours for a prolonged period to noise whose intensity exceeds 85 dB [approx 90dB(A)] in any octave band in the speech frequency range (250-4,000 cycles per second) may cause permanent damage to hearing;'…

533. Much could be done voluntarily within industry, and, indeed, we know that some firms already have well established hearing conservation programmes. There is, however, a need for a wider and more urgent interest in the problem. We recommend, as immediate steps, that the Ministry of Labour should:

> (a) disseminate as widely as possible existing knowledge of the hazard of noise to hearing;
>
> (b) impress on industry the need to take action to reduce the hazard as it is at present recognised; and
>
> (c) advise industry on practical measures to this end.

534. Although voluntary action is now possible and, indeed, essential, we do not consider that the present knowledge of this complex problem provides a sufficient basis for legislation. …"

138. Acting on the advice contained in para 533 of the Wilson Report, in June 1963 the first edition of a Ministry of Labour publication entitled "Noise and the Worker" made the following recommendations:

> "The first steps in the programme [i.e. a 'Noise Reduction and Hearing Conservation Programme'] are to carry out a noise survey and to obtain specialist advice. (page 5)
>
> Our knowledge of the relation of noise to hearing loss is as yet too limited for it to be possible to say with certainty what amount of exposure is safe – partly because people vary greatly in their susceptibility to noise. It is generally agreed, however, that if workers are exposed for eight hours a day, five days a week, to a continuous steady noise of 85 dB or more in any octave band, in the speech range of frequency (500 to 4,000 cycles per second), it is desirable to introduce a programme of noise reduction or hearing conservation. … (page 7)
>
> Where it is not possible, by environmental control, to reduce noise to sufficiently safe levels, workers should be protected by ear defenders. … (page 14)"

139. The second edition of "Noise and the Worker" was published in June 1968. In a section entitled "Monitoring Workers' Hearing" it stated that workers exposed to levels of noise *at or approaching* those set out in a table should have their hearing tested periodically. The table contained a range of decibel levels from 80 to 100 with corresponding frequency bands of 1200-4800 (in relation to 80 decibels) up to 37.5-150 (in the case of 100 decibels).

140. The third edition of "Noise and the Worker" was prepared by the Health and Safety Executive in 1971. It gave the following warning:

> "Because some people are more liable to hearing loss than others and because our knowledge of the effects of noise exposure, especially exposure to intensive noise of short duration, is still incomplete it is not possible to set out a simple table of permissible limits for all types of noise."

141. The publication nevertheless contained a table which set out levels of noise which indicated a *serious* hazard to hearing. Eight hours' exposure to noise levels of 90 dBA was stated to constitute such a serious hazard. This can only be taken to mean that there was a distinct, albeit less serious, hazard to hearing at lower levels. That conclusion is confirmed by the injunction that appears later in the text (page 9) to the effect that damage risk criteria should be regarded as maximum permissible levels and not as desirable levels. If possible the noise should be reduced to levels lower than the danger levels set out in the table. This was particularly required in order to avoid risk to "the minority of people who are exceptionally susceptible to hearing damage, and for reasons of general welfare".

142. Two salient conclusions can be drawn from these statements. Employers should have been aware that damage to hearing could occur at levels less than 90 dBA. They ought also to have realised that there may well be vulnerable individuals within the workforce whose hearing was particularly at risk at those lower levels.

143. Other material was available about the risk of noise induced damage to hearing, most notably *Hearing and Noise in Industry* detailing the research carried out by Burns and Robinson in 1970. Together with the publications that I have so far reviewed, this provided the essential setting in which the seminal Code of Practice for reducing the exposure of employed persons to noise was published in 1972. The gradually evolving state of knowledge that emerges from the earlier documents is manifest from the Code of Practice itself. In a foreword, the Secretary of State for Employment, Rt Hon Robert Carr MP, said:

> "It has been common knowledge for many years that high levels of noise at work can cause impairment of hearing. In a few firms where there is this danger, good work has been done in suppressing noise, but in many others the problem has not been recognised, or has been under-estimated. In those firms, the tragedy is that all too often the workers are accustomed to the noise and do not notice the gradual deterioration of their hearing until it is too late. For hearing lost in this way cannot be recovered.
>
> The general solution to this problem, which is a complex one, has been hampered more by ignorance than by neglect. Until the pioneer work of Professor Burns and Dr. Robinson was published in March 1970, we lacked the necessary scientific knowledge of the precise levels of noise, and the duration of exposure to them, which can cause damage. It is largely due to their work that this Code of Practice has been made possible. The provisions in the code, and its publication, have been recommended by my Industrial Health Advisory Committee on which both sides of industry are represented. It is the outcome of 12 months' work by a sub-committee. I regard the publication of the Code as the first important step in the prevention of loss of hearing due to noise at work. It should be considered as a blueprint for action."

144. The Code was at pains to reinforce the message that had been conveyed by earlier publications to the effect that recommended limits on noise exposure could not be taken as eliminating all risk of noise induced hearing loss. Prominently, at para 1.1.2, it stated:

> "The Code sets out recommended limits to noise exposure. It should be noted that, on account of the large inherent variations of susceptibility between individuals, these limitations are not in themselves guaranteed to remove all risk of noise-induced hearing loss."

145. Section 4 of the Code, dealing with limits on sound levels, reiterated the need to regard these as *maximum* levels which ought not to be exceeded. It was desirable that levels of noise be reduced below those specified. Para 4.3.1 provided that if exposure was continued for eight hours in any single day, and was "to a reasonably steady sound", the sound level should not exceed 90 dB(A).

146. In her judgment in the Court of Appeal Smith LJ had said at para 6 that the Code of Practice, having explained that protection from noise of 90dB(A)leq

would not protect all workers from hearing damage, had indicated that some harm was likely to be caused to some susceptible workers by noise below that level. Lord Mance has observed that the use of the word "likely" in this context was not justified because the Code had in fact stated that the limitations which it specified were "not in themselves guaranteed to remove all risk of noise-induced hearing loss". It may well be that the particular formulation chosen by Smith LJ was not strictly justified but by 1972 it was recognised that a minority of workers would suffer hearing loss if exposed to noise levels of less than 90 dB(A) – see the third edition of "Noise and the Worker" (referred to in para 5 above).

147. Lord Mance and Lord Dyson have concluded that the Code of Practice set an appropriate standard on which a reasonable and prudent employer could legitimately rely. In Lord Mance's view, it was acceptable for such an employer to continue to rely on the Code for this purpose until the late 1980s. Lord Dyson agreed with the trial judge, His Honour Judge Inglis, that the Code remained the "touchstone of reasonable standards" for the average reasonable and prudent employer at least until the publication in 1986 of the draft proposal for a Council directive on the protection of workers from the risks related to exposure to noise. The Court of Appeal, although expressing a preference for an earlier date, felt that the trial judge was entitled to reach the conclusion on this issue that he expressed in para 87 of his judgment. I shall consider this paragraph in a little detail presently.

148. Before examining the question of how long an employer might reasonably rely on the Code, it is, I believe, necessary to look at what a reasonable employer would have taken from the information contained not only in the Code but also in the earlier publications that I have discussed. True it is that 90 dBA was the stipulated danger level. But employers were not told that lower levels were safe. On the contrary, they were told that certain employees could well suffer a hearing loss if exposed to noise at lower levels. That risk had been clearly signalled. Employers had also been told that too little was known about the relationship of noise to hearing loss to say with certainty what amount of exposure was safe. What ought to have been the reaction of a prudent and reasonable employer to that information? It seems to me that adopting a passive, sanguine attitude to the risk of hearing loss in workers exposed to noise of less than 90 dBA was not an available option. The Code was described as "a blueprint for action". It was certainly not a blueprint for inaction.

149. In *Doherty v Rugby Joinery (UK) Ltd* [2004] ICR 1272 Hale LJ stressed that the duty on the employer was to consider those within the workforce who (although not identifiable in advance) would be particularly susceptible to vibration injury. This seems to me to be an important argument against passivity on the part of employers following the publication of the 1972 Code. A prudent employer should have concluded that the health of a minority was at risk when

exposed to noise levels below 90dB(A). The law should not, and in other areas does not, deny protection to a minority simply because they are a minority. An employer's duty extends to the protection of those of his employees who are, by dint of their susceptibility to injury, more likely to sustain it.

150. Whatever may have been the position immediately after the Code was published, treating it as an enduring touchstone was no longer possible after 1976, in my opinion. The effect of ISO 1999, published in 1975 and BS 5330 in 1976 was described by Judge Inglis in para 87 of his judgment in the following passage:

> "There is no doubt that research into the question of what risks to the hearing of employees exposure below 90dB(A)leq posed would have yielded the answer that 90dB(A) was not a natural cut off point, and that there were risks to susceptible individuals below that level. Indeed, the 1972 Guidelines themselves made that clear. From the early 1970s, certainly by 1976 with the publication of BS5330 and of lS0 1999 in the previous year, the information was available if researched to give an indication of the level of the risk."

151. Judge Inglis considered that research was required to unearth the information that there was a risk to the hearing loss of some employees who were exposed to noise at a lesser level than 90 dB(A). There appears to me to be an inherent contradiction in play here. The Code has been hailed as the basis on which a reasonable and prudent employer might determine that protection was required. This obviously presupposes that the reasonable and prudent employer was aware of the contents of the Code. But within the very Code that provided the basis for the defence that an employer might deploy was the cautionary admonition that some workers would suffer some damage if exposed to noise levels of less than 90 dB(A). In this connection, Lord Dyson has said that the "clear message" of the Code was that the risk to particularly susceptible people was sufficiently small, both in terms of the numbers who might be affected and the seriousness of any damage that might result, to be acceptable. With respect, I cannot agree. Nowhere in the Code is any estimate made of the numbers who might constitute this exceptional category. Nor is there any assessment offered of the degree of disability that might accrue to those who were affected. What the 1972 Code should have conveyed to employers (especially those who sought subsequently to rely on it for the defence of noise induced hearing loss claims) was that an unquantified minority of their workforce would suffer hearing loss if exposed to noise levels at less than 90 dB(A). As a minimum, this should have made them alert to further information from public authority sources that might emerge in coming years.

152. By contrast with the Code, ISO 1999 and BS 5330 *did* permit an estimate to be made of the number of workers who would be affected by exposure to various levels of noise below 90 dB(A). Thus, in para 13 of his judgment the judge, by reference to a table produced by Professor Lutman, was able to calculate that noise exposure of 85 dB(A)lepd over 40 years would cause 8.5dB hearing loss at 4khz. At para 14 the judge reproduced a table from a paper by Professor Robinson which showed that 10% of a typical population exposed for 30 years to 85dB(A)lepd will have a hearing loss of 35dB. This can be compared to a non-noise exposed population, 10% of whom at age 48 would have a hearing loss of 31.5. It was thus possible to show that noise exposure added a further 3.5dBs of hearing loss in this percentile. And at para 21 the judge reproduced a further table from Professor Lutman which showed a 9dB threshold loss at 4 kHz in 5% of men exposed to 85 dB(A)lepd for 45 years.

153. Now it is true, as Lord Mance has pointed out, that neither ISO 1999 nor BS 5330 purported to identify a maximum tolerable noise exposure. Indeed, both documents disavowed any attempt to do so. But that, as it seems to me, is neither here nor there. What is important in this context is that employers who exposed their employees to noise had been alerted in 1972 to the fact that some employees who were exposed to noise levels of less than 90 dB(A) would suffer hearing loss and in 1976 a means of calculating what percentage of their workforce would be affected was available to them.

154. From 1976 onwards, therefore, employers, who should since 1972 have been alive to the dangers of noise induced hearing loss in a percentage of their employees exposed to levels of noise in excess of 85 dB(A), could estimate what the percentage was likely to be. All that was unknown was which particular workers would fall into that category. What was certain was that, if they were exposed over a sufficiently long period, some at least of their workforce would suffer permanent, irremediable damage to their hearing. Although that hearing loss would not be substantial, its impact on those who were affected by it is not to be underestimated. As the respondent submitted, it diminishes the lives of those who suffer from it in a real and significant way.

155. The appellants have argued that a reasonable employer could not have been expected to read, absorb and apply ISO 1999 and BS 5330. I do not accept that argument. The cornerstone of the appellants' defence is the Code of Practice of 1972. If this is proffered as the reason that it was acceptable for employers not to supply ear defenders to employees unless they were exposed to noise levels of 90 dB(A) and greater, it must also be acknowledged as the source of warning that noise levels less than that would damage some workers' hearing. Thus alerted, it seems to me that an employer's obligation to remain abreast of information that would allow him to know what percentage of his workforce was likely to be affected was plain.

156. This conclusion does not conflict with the classic statement of principle by Swanwick J in *Stokes v Guest, Keen and Nettlefold (Bolts and Nuts) Ltd* [1968] 1 WLR 1776, 1783:

> "… the overall test is still the conduct of the reasonable and prudent employer, taking positive thought for the safety of his workers in the light of what he knows or ought to know; where there is a recognised and general practice which has been followed for a substantial period in similar circumstances without mishap, he is entitled to follow it, unless in the light of common sense or newer knowledge it is clearly bad; but, where there is developing knowledge, he must keep reasonably abreast of it and not be too slow to apply it … He must weigh up the risk in terms of the likelihood of injury occurring and the potential consequences if it does; and he must balance against this the probable effectiveness of the precautions that can be taken to meet it and the expense and inconvenience they involve. If he is found to have fallen below the standard to be properly expected of a reasonable and prudent employer in these respects, he is negligent."

157. While, for reasons that I shall discuss below, it could be concluded that a practice of recommending protection for those exposed to 90 dB(A) and above had grown up, so far from there being a recognised and general practice which had been followed for a substantial period in similar circumstances *without mishap,* as I have sought to demonstrate in the review of the various government publications on this subject, thinking on the problems of noise at work was characterised by uncertainty and qualification until 1972 and beyond. In the 1970s knowledge was developing and conclusions, albeit qualified conclusions, were emerging. There was a clear duty on the part of employers to keep abreast of these, a duty made all the more acute by the uncertainty of the past. The information that became available in 1975 and 1976 would have led to the conclusion that a sufficiently significant percentage of a workforce exposed to noise at levels greater than 85dB(A) would suffer a hearing loss. I therefore agree with Smith LJ's analysis on this issue, although not with her conclusion on liability at common law.

158. At para 101 of her judgment, Smith LJ said this:

> "… from July 1976, there was a method available which could be used by anyone with a modest degree of mathematical skill. Certainly any consultant acoustic engineer could have used the British Standard method. Accordingly, I conclude that by late 1976 or early 1977, the average-sized employer in the knitting industry could and should have been able to make an informed assessment of the quantum of risk arising from the below 90dB(A)lepd noise in his

> workshops. As I have said above, this assessment would have led the employer to broadly the same conclusion as was reached by Judge Inglis. Once that assessment had been made, it could not in my judgment be said that it was not reasonably practicable to provide ear protectors."

159. The "conclusion reached by Judge Inglis" referred to in this passage was that when exposed to noise above the level of 85dB(A) the risk of suffering hearing loss accelerates up to 90dB(A) and in the high 80s, given long enough exposure, significant hearing loss may be expected in at least a substantial minority of individuals. That important finding was not challenged either in the Court of Appeal or in this court. It appears to me to lie at the heart of the issue of the liability of the appellants at common law. The finding was complemented by another important conclusion reached by the judge, a conclusion which again no-one has sought to challenge. At para 73 of his judgment he said:

> "The evidence does not show that at any time the cost of implementing a policy of voluntary hearing protection at levels below 90dB(A) was such that a reasonable employer could use cost or difficulty as a valid reason for not having such a policy."

160. Shortly put, therefore, from 1977 onwards an employer in the knitting industry should have known that a percentage of his workforce would suffer hearing loss if they were exposed to and remained unprotected from noise levels of more than 85dB(A). Such an employer should also have known that he could provide ear protection that would have reduced the risk of that hearing loss occurring at not inordinate cost.

161. Both Judge Inglis and Smith LJ appear to have absolved employers of liability at common law because, until the late 1980s, advice was not given to them that ear protection was required for noise levels below 90 dB(A). The failure to give this advice seems to have been due to the manner in which the experts addressed the question. Thus in paras 46 and 47 of Judge Inglis's judgment the following appears:

> "… There was evidence given by the expert witness engineers for Courtaulds (Mr Bramer and Mr Currie) about the approach to control of noise in the period from the 1970s in industry. The report of Mr Worthington for Pretty Polly and Guy Warwick is also in evidence. To Mr Bramer, the guidance in Noise and the Worker and the 1972 Guidelines provided a "clear and consistent recommendation to employers as to how they ought to deal with noise in the workplace".

> The result was that in his practice, his invariable advice until the late 1980s, was that "the relevant level was a daily personal noise exposure of 90dB(A)". This approach, he said, was standard during the period up to 1989 among noise professionals, and taught at training courses. In the mid 1980s, when it appeared that EEC regulation would involve a first action level of 85dB(A) his advice changed to reflect that. He was not aware of the NPL tables before the 1980s when he found that they were being used by medical experts writing reports for the purpose of deafness claims. He has never come across them being used in any part of industry. In evidence Mr Bramer said that he gave advice to employers in terms of complying with the 1972 Code. He was speaking to the 90dB(A) level, as were all his colleagues. He agreed that the advice would be to answer the question "Tell us how to comply with legislation and the Code of Practice", rather than "Tell me how to avoid reasonably foreseeable risk to my workforce". He would have recommended 90dB(A) as the cut off point, but would also have said "that does not actually stop some more susceptible people from having some small noise induced hearing loss". If asked about risk, he would have had some difficulty, and regarded the question as more one for medical people.
>
> 47. Mr Currie said that the Health and Safety Executive and factory inspectors after the 1974 Act concentrated their advice and enforcement on the 90dB(A) level. He was not aware of any instance in which the NPL tables had been used by employers to predict the level of risk for their workforce. In evidence Mr Currie said that good practice won't necessarily remove all risk. He agreed that there has been no very different understanding about noise induced hearing loss since the 1970s. The first thing to look at when deciding on practices, which is what employers have to do, is to look at the guidance available. Mr Worthington's report is to the effect that employers looked to the 90dB(A) limit in the Code of Practice as the maximum acceptable limit, and that the Factory Inspectorate and HSE did not refer employers to the risks below that limit as risks about which they should take action. That was the practice of the day, and employers taking advice, if they did, would be referred to the standard in the Code as being what had to be observed."

162. Mr Bramer's evidence, recorded uncritically by Judge Inglis, so far from bolstering the case for the appellants, seems to me to have exposed critical weaknesses in it. To deliver "invariable advice" that the relevant level was a daily personal noise exposure of 90dB(A) (by which, one presumes, he means that it was acceptable to ignore dangers arising from noise exposure below that level)

crucially fails to take account of the unambiguous evidence that risks to a percentage of employees from exposure to noise of over 85 dB(A) had been recognised. What was to become of this group in Mr Bramer's equation? Were they to be discounted as an insignificant minority? If so, on what basis did he assess their significance? And on what basis did he conclude (if indeed he did conclude) that the hearing loss that they would sustain could be overlooked?

163. Of course, Mr Bramer sidestepped most of these difficult issues by saying that he tailored his advice to address the question how would the legislation and the Code of Practice be complied with, rather than how could the employer comply with his elementary duty of avoiding foreseeable risk to his employees. Judge Inglis appears again not to have cast a critical eye on this aspect of Mr Bramer's testimony and the Court of Appeal was likewise silent as to its reaction to it. But the fundamental duty of an employer is that he should ascertain by whatever reasonable means are at his disposal, what are the likely dangers to his employees from the work that he asks them to do and that he should then do what he reasonably can to avoid those dangers.

164. Mr Bramer gave evidence that if he had been asked what appears to me to be not only the right, but also the obvious, question of how to avoid reasonably foreseeable risk to employees, he would have adverted to the fact that some risk to susceptible employees of "small noise induced" hearing loss would arise. But he would not have been able to assess what that risk was, how many employees would be affected nor the level of disability that it would give rise to, these matters lying more in the province of "medical people". Of course he was not asked the right and obvious question. He ought to have been. But if he had been asked that question, he could not have given any meaningful reply. It seems to me remarkable that an employer who should have asked, in light of what the Code of Practice had said, what were the dangers to the minority of his workforce who would suffer damage to their hearing by exposure to levels of noise that were current in his factory and what he could do about those dangers, can be relieved of liability because he did not ask the right question and because his expert did not direct him to the right issue.

165. The evidence of Mr Currie and Mr Worthington is open to the same criticisms which attach to that of Mr Bramer. The fact that after the 1974 Act the Health and Safety Executive and factory inspectors concentrated their advice and enforcement on the 90dB(A) level does not relieve employers of the duty to inform themselves of the true purport of the available evidence. After all, Judge Inglis was able to calculate without difficulty what percentage of workers would be likely to suffer hearing loss on the basis of data that were available to any employer from 1977 onwards. He may have been directed to those data by reports of the experts produced at trial but the data existed in the 1970s. Employers and those who advised them ought to have considered those data shortly after they became

available in 1976; they should have made the calculation that Judge Inglis was able to make many years later; they ought to have concluded, as he did, that a significant minority would suffer hearing loss if exposed to noise levels exceeding 85 dB(A) over a prolonged period; they should have discovered that this could be avoided by the provision of ear defenders at not unreasonable cost; and they should have provided their workers with those ear defenders. Because of their failure to do so, they were, in my opinion, guilty of negligence.

166. In reaching this conclusion I have kept in mind the salutary warning of Mustill J in *Thompson v Smith Shiprepairers* [1984] QB 405, 422 where he said:

> "One must be careful, when considering documents culled for the purpose of a trial, and studied by reference to a single isolated issue, not to forget that they once formed part of a flood of print on numerous aspects of industrial life, in which many items were bound to be overlooked. However conscientious the employer, he cannot read every textbook and periodical, attend every exhibition and conference, on every technical issue which might arise in the course of his business; nor can he necessarily be expected to grasp the importance of every single item which he comes across."

167. The employers in this appeal and their advisers were not required to immerse themselves in esoterica in order to understand what I believe to be the clear – and simple – import of the material that confronted them. The evidence that some of their employees were at risk was unmistakable. Hindsight is not required in order to see that clearly. The means of mitigating that risk were also clear. The need to take the necessary steps cannot plausibly be challenged.

168. It is not only unnecessary, in light of my view about the common law liability of the appellants from the late 1970s onwards, for me to embark on any exegesis about how soon employers should have been alerted by the imminence of European legislation to the need to protect workers from noise levels of 85dB(A), it would be inappropriate for me to do so on what would be an academic basis. In my view, their liability arose much earlier.

The employers' liability under statute

169. As Lord Mance has said, several issues arise in addressing the questions whether section 29 of the Factories Act 1961 covers exposure to noise in the workplace, and, if so, what standards it sets. It seems to me that these can be grouped in four categories. First whether the section is designed to cover only the

physical fabric and structure of the workplace. Second, are the duties imposed applicable only to occupiers as opposed to employers? (This issue was raised for the first time on the hearing of the appeal to this court). Thirdly, even if activity within the workplace is covered, does it apply to environmental conditions which may only have a deleterious effect over a long period of time? Finally, what does "safe" mean? Does it mean what can be reasonably foreseen or does it set an absolute standard?

170. On the first of these issues, for the reasons given by Lord Mance, with which I agree, the answer must surely be that activities carried on in the workplace which render it unsafe, come clearly within the embrace of the section. The context of the provision is the protection of workers in factories. The nature of factories is that employees will carry on working activities, some at least of which will carry potential, inherent dangers. When an employer is enjoined to provide a safe place of work, it can only be for the purpose of ensuring that the work that is carried on in the place where it occurs does not jeopardise the employees' safety. The work activity cannot be divorced from the physical location where it takes place.

171. On the second question, it is, I think, significant that neither employer nor occupier is defined in the legislation and the terms, I am satisfied, are used interchangeably throughout the Act. Employers' duties are imposed and require to be discharged in the factory setting. It would thwart the entire purpose of the legislation to confine the discharge of those duties artificially to occupiers and to exempt employers from their reach. I have concluded that the duties arising under the Factories legislation were intended to be imposed on employers, whether they be occupiers or not.

172. The third question does not admit of quite such an easy answer as the first two. It is, I believe, helpful to have regard to the general character or nature of the provision and the timing of its enactment. It is a provision which imposes a general requirement and it can be assumed, I think, that Parliament realised that it would be impossible, at the moment of its enactment, to prescribe comprehensively all the ways in which a place of work might become dangerous. This was therefore a catch-all provision designed to ensure that workplaces be kept safe in any and all of the myriad ways that danger might arise in the future. One rather prosaic way of considering the question might be to imagine what the response of the enactors of the legislation might be if they had been asked in 1961, whether, if in 20 years time it proved that a workroom where women were required to operate knitting machines at a level of noise that would irreversibly damage their hearing, they intended that the requirement that employers maintain a safe place of work should apply to that situation. I believe that their answer would unquestionably be "yes".

173. A rather more principled way of addressing the question can be found in Bennion's treatment of the subject of the presumption that an updating construction is to be given to an enactment. At section 288 of the fifth edition (2008) of his work on *Statutory Interpretation*, he says this:

> "**Section 288. Presumption that updating construction to be given**
>
> (1) With regard to the question of an updating construction, Acts can be divided into two categories, namely the usual case of the Act that is intended to develop in meaning with developing circumstances (in this Code called an ongoing Act) and the comparatively rare case of the Act that is intended to be of unchanging effect (a fixed-time Act).
>
> (2) It is presumed that Parliament intends the court to apply to an ongoing Act a construction that continuously updates its wording to allow for changes since the Act was initially framed (an updating construction). While it remains law, it is to be treated as *always speaking*. This means that in its application on any date, the language of the Act, though necessarily embedded in its own time, is nevertheless to be construed in accordance with the need to treat it as current law.
>
> (3) A fixed-time Act is intended to be applied in the same way whatever changes might occur after its passing. Updating construction is not therefore applied to it.
>
> (4) Where, owing to developments occurring since the original passing of an enactment, a counter-mischief comes into existence or increases, it is presumed that Parliament intends the court so to construe the enactment as to minimise the adverse effects of the counter-mischief.
>
> …"

174. This appears to me to be a classic case of the "mischief" of noise induced hearing loss from exposure to 85 dB(A) becoming recognised during the lifetime of the relevant legislation. An updating construction is clearly called for and should be applied to the updated mischief.

175. The always speaking principle is well-established. Its clearest exposition remains that of Lord Wilberforce in *Royal College of Nursing of the United Kingdom v Department of Health and Social Security* [1981] AC 800, 822:

> "In interpreting an Act of Parliament it is proper, and indeed necessary, to have regard to the state of affairs existing, and known by Parliament to be existing, at the time. It is a fair presumption that Parliament's policy or intention is directed to that state of affairs. Leaving aside cases of omission by inadvertence, this being not such a case, when a new state of affairs, or a fresh set of facts bearing on policy, comes into existence, the courts have to consider whether they fall within the parliamentary intention. They may be held to do so, if they fall within the same genus of facts as those to which the expressed policy has been formulated. They may also be held to do so if there can be detected a clear purpose in the legislation which can only be fulfilled if the extension is made. How liberally these principles may be applied must depend upon the nature of the enactment, and the strictness or otherwise of the words in which it has been expressed."

176. The discernible policy of section 29 was to ensure that the place at which employees had to work was safe and since, for the reasons given, this aspiration was directed not only at the fabric and structure of the place but also at the working activities within it, the "fresh set of facts" represented by the risks of hearing loss from exposure to noise must be taken to fall within the parliamentary intention. Indeed, to exclude noise as a possible means by which a place of work might be rendered unsafe would run directly counter to the parliamentary intention that places of work were generally rendered into a safe condition. Now that it is well known that exposure to loud noise in a working environment without protection will bring about irreversible hearing loss, it is inconceivable that noise should not be accommodated within the reach of the section.

177. The final question is perhaps the most difficult. Must safety be seen as an objective standard or is it a relative concept? The straightforward answer is that a place is safe or it is not. A place which is not safe cannot be said to be safe merely because it is believed to be, however justified the belief.

178. Lord Mance has said that "there is no such thing as an unchanging concept of safety". I agree, but as he has also observed, safety must be assessed objectively. It appears to me that the truly critical question is to which point in time should the assessment relate. Lord Mance's view is that what he describes as "a retrospective assessment" based on knowledge current at the time that the court

is considering the matter is impermissible. I am afraid that I cannot agree with that view.

179. I do agree, however, that safety, in the context of section 29, does not connote absolute safety in the sense of the elimination of every conceivable risk. As was said in *Sheppey v Matthew T Shaw & Co Ltd* [1952] 1 TLR 1272 and *Trott v WE Smith (Erectors) Ltd* [1957] 1 WLR 1154 (CA) (to which Lord Mance has referred) a safe means of access does not mean absolutely safe so that no accident could possibly occur. But as Parker J in *Sheppey* pointed out, simply because safe does not mean "absolutely safe", it does not follow that it means "reasonably safe". A means of access is unsafe if it is a possible cause of injury to anybody acting in a way a human being may be reasonably be expected to act.

180. There is nothing in *Sheppey* or *Trott* which suggests that the court in either case considered that safety had to be judged solely according to the state of knowledge at the time that the injury was sustained. Of course, neither case involved a re-evaluation of what constituted safe in the light of evolving knowledge. As I have said, both cases are authority for the proposition that "safe" does not mean "absolutely safe" but I do not consider that this provides the answer to the question whether safety is to be judged by reference to what was believed to be safe at the time that the damage occurred. Therefore, when Lord Hope in *R v Chargot Ltd (trading as Contract Services)* [2008] UKHL 73; [2009] 1 WLR 1, 12-13 said that the Health and Safety at Work etc Act 1974 was "not contemplating risks which are trivial or fanciful", and that the statutory framework was "intended to be a constructive one, not excessively burdensome", and that the law "does not aim to create an environment that is entirely risk free", he should not, in my opinion, be taken as suggesting that a state of affairs which is undoubtedly unsafe should be held not to have been unsafe for the purposes of the legislation simply because, at the time that injury was suffered, it was believed to be safe.

181. Since safety is not an absolute, immutable concept, forseeability may play a part in the assessment whether a place was safe but I do not believe that this must necessarily be rooted in perceptions of what was historically considered to be safe. There is nothing wrong in principle in recognising that a place of work was unsafe based on contemporary knowledge. Forseeability of risk *based on current information* is relevant to the judgment whether a place of work was in fact safe. Thus, since it is now indisputable that a substantial minority of employees will develop hearing loss if exposed to noise levels of more than 85 dB(A) over a prolonged period, it is possible to recognise that the place at which the respondent was required to work was unsafe within the meaning of section 29. The role played by forseeability in this context is necessarily limited. It is confined to the judgment as to what is necessary, in light of all currently available information, to render a

workplace free from such risks as might befall anybody acting in a way a human being may be reasonably be expected to act.

182. By contrast, however, reasonable practicability does import consideration of what was known at the time that the injury was sustained. By definition it cannot be reasonable to put in place measures that are not known to be necessary. It may be practicable to do so but it cannot be said to be *reasonably* practicable. As the Court of Appeal in the present case said at para 83 of Smith LJ's judgment, it is "a matter of common sense [that], if the employer does not know of the risk and cannot reasonably have been expected to know of it, it cannot be reasonably practicable for him to take any steps at all".

183. Once it is clear that the employer knew or should have known that there was a risk, an evaluation of the chances of the risk materialising is relevant to an examination of what it is reasonably practicable for an employer to do – as Lord Goff put it in *Austin Rover Group Ltd v HM Inspector of Factories* [1990] 1 AC 619, 626-627:

> "… for the purpose of considering whether the defendant has discharged the onus which rests upon him to establish that it was not reasonably practicable for him, in the circumstances, to eliminate the relevant risk, there has to be taken into account (inter alia) the likelihood of that risk eventuating. The degree of likelihood is an important element in the equation. It follows that the effect is to bring into play forseeability in the sense of likelihood of the incidence of the relevant risk, and that the likelihood of such risk eventuating has to be weighed against the means, including cost, necessary to eliminate it."

184. I agree with Smith LJ in her conclusion (at para 84 of her judgment) that for the defence to succeed, the employer must establish a gross disproportion between the risk and the measures necessary to eliminate it. In the words of Asquith LJ in *Edwards v National Coal Board* [1949] 1 KB 704, 712, "the risk [must be] insignificant in relation to the sacrifice". In the present case, the provision of ear defenders at relatively modest cost was entirely practicable. For that reason, and since I have concluded that the employers ought to have been aware of the risk of noise induced hearing loss to the respondent, I do not consider that the defence of reasonable practicability was available to them.

Conclusions

185. Although the respondent has chosen, for what her counsel described as pragmatic reasons, not to challenge the findings of the Court of Appeal as to the date on which the appellants could have been said to be negligent for failing to recognise the risk of noise induced hearing loss, I have concluded that this was much earlier than was found by Smith LJ. Since the Court of Appeal's findings on this issue were not challenged by the respondent, however, and since I have found that the statutory defence was not available to the appellants, I must content myself with saying that I would dismiss the appeal.

LORD CLARKE

Introduction

186. As Lord Dyson observes, the history and awareness of the risks of occupational exposure to noise have been fully set out by Lord Mance. In addition, the issues have been discussed in considerable detail by Lord Mance, Lord Kerr and Lord Dyson. I shall therefore try not to repeat what they say, save in so far as it is necessary to explain the conclusions which I have reached.

187. One of the striking features of the issues in this case, at any rate as it seems to me, is that the science upon which decisions as to what precautions employers should take to protect their employees from hearing loss caused by noise in the workplace had scarcely changed since the research carried out by Burns and Robinson in 1970, which led to the Code of Practice in 1972. All that has changed is the formation of a different view on the part of industry and the regulators as to the level of risk that it is acceptable to disregard.

188. In these cases the claimants allege breaches by the employers of their duty under section 29(1) of the Factories Act 1961 ("the 1961 Act"), so far as reasonably practicable, to make and keep their place of work safe for them. If there is a breach of this duty, the question whether they were also in breach of their duty of care at common law becomes irrelevant because, so far as I am aware, nobody suggests that the claimants could recover more or different damages at common law from those recoverable for breach of statutory duty. I shall therefore consider first the issues under section 29. It is important to keep the questions relevant to the two bases of claim separate because the issues are different. If section 29 applies, the approach to the question whether there was a breach of duty under that section is materially different from the approach to the question whether there was a breach of duty at common law. Lord Wright made this clear in *Caswell v Powell*

Duffryn Associated Collieries Ltd [1940] AC 152, 178 and *London Passenger Transport Board v Upson* [1949] AC 155, 168.

Section 29 - the principles

189. Section 29(1) of the 1961 Act provided:

> "There shall, so far as is reasonably practicable, be provided and maintained safe means of access to every place at which any person has at any time to work, and every such place shall, so far as is reasonably practicable, be made and kept safe for any person working there."

190. The first question that arises is whether section 29(1) applies in this class of case. Lord Mance discusses this question in detail. He asks three questions. They are whether section 29(1) applies to activities carried on in the workplace, whether it applies to risks of noise-induced hearing loss arising from such activities in relation to long-term employees working in the workplace and what is the meaning of safe. He answers the first two questions in the affirmative. Both Lord Kerr and Lord Dyson agree with him, essentially for the reasons he gives. So do I. In particular, I agree with Lord Kerr and Lord Dyson that, for the reasons they give, the language of the section is "always speaking".

191. I agree with Lord Kerr that in this context safety cannot connote absolute safety: *Sheppey v Matthew T Shaw & Co Ltd* [1952] 1 TLR 1272 and *Trott v WE Smith (Erectors) Ltd* [1957] 1 WLR 1154. In *Sheppey* Parker J said that it cannot mean absolutely safe in the sense that no accident could possibly occur. *Trott* was concerned with regulation 5 of the Building (Safety, Health and Welfare) Regulations 1948 (SI 1948/1145), which included a provision that:

> "... sufficient safe means of access shall so far as is reasonably practicable be provided to every place at which any person has at any time to work."

The Court of Appeal accepted that the regulation did not require absolute safety. Parker J was by now Parker LJ. He said at p 1162 that a means of access was not safe within regulation 5 if it was a possible means of injury to someone acting in a way that a human being might reasonably be expected to act in circumstances that might reasonably be expected to occur. I would accept that approach. The section does not say "reasonably safe". Nor does it say that the workplace is safe if it is believed to be safe. The question remains simply whether the workplace was, at

the relevant time, safe. I note in passing that Jenkins LJ said at p 1158 that the obligation to provide a safe means of access so far as reasonably practicable placed a stricter obligation on the employer than is placed upon him in the discharge of the general duty of reasonable care at common law. I agree.

192. The word "safe" in section 29(1) is not limited by the concept of reasonable foreseeability. However, as Lord Mance and Lord Dyson have explained, there is a line of authority that it should be construed as if it were, by reference to the meaning of "dangerous" in section 14(1) of the 1961 Act and its predecessors. See eg *Hindle v Birtwhistle* [1897] 1 QB 192, *John Summers & Sons Ltd v Frost* [1955] AC 740, *Close v Steel Co of Wales Ltd* [1962] AC 367 and, to similar effect, the unreported decision of Rose J in *Taylor v Fazakerley Engineering Co*, 26 May 1989. This line of authority imports the concept of reasonable foreseeability into the meaning of "safe" on the basis that "safe" is the converse of "dangerous": see to this effect the judgment of Diplock LJ in *Taylor v Coalite Oils & Chemicals Ltd* [1967] 3 KIR 315 and *Allen v Avon Rubber Co Ltd* [1986] ICR 695. There is, however, a second line of authority in which the Court of Appeal and the Extra Division of the Inner House of the Court of Session concluded that it is inappropriate to equiparate section 14 with section 29 of the 1961 Act: see *Larner v British Steel plc* [1993] ICR 551, *Neil v Greater Glasgow Health Board* [1994] SLR 673, *Mains v Uniroyal Engelbert Tyres Ltd* [1995] SC 518 and *Robertson v RB Cowe & Co* [1970] SLT 122.

193. I do not think there is any basis on which it is possible to distinguish this second line of authority. The question then arises which line of authority to follow. I see the force of the approach of Lord Mance and Lord Dyson, which is to prefer the first strand of authority: see Lord Mance at para 71 and Lord Dyson at para 118. For my part I prefer the second. I do so for these reasons.

194. The reasoning in the second line of cases is to my mind compelling. In particular, it is supported by the language of section 29(1), which is not reflected in section 14(1). This is emphasised by the reasoning of both Hirst LJ and Peter Gibson J in the Court of Appeal in *Larner*. At p 559 Hirst LJ quoted from the 11th edition of *Munkman's Employer's Liability* (1990), pp 292-293:

> "(v) When is access – or place – unsafe?
>
> 'Safe' is, however, a simple English word and there is no reason why it should not be decided as a pure question of fact whether a place is 'safe' or not. Unfortunately, the vague and uncertain notion of foreseeability has been introduced as a test."

Hirst LJ added at pp 559-560

> "This view seems to me to have considerable force in the light of the very clear wording of section 29(1), which contains no reference to foreseeability, and seeing that, if [counsel's] argument is correct, the distinction between the common law duty of care and the statutory duty will be virtually obliterated."

195. Peter Gibson J said at pp 560-561 that the way in which the duty in section 29(1) was framed made it clear that to make good a claim for breach of statutory duty under section 29(1) the plaintiff had to allege and prove injury while and in consequence of working at a place at which he had to work and that such place was not made or kept safe for him. It was then for the employer to establish that it was not reasonably practicable to make and keep such place safe. It was common ground in the present appeal that in this last respect the burden was on the employer: *Nimmo v Alexander Cowan & Sons Ltd* [1968] AC 107, *Gibson v British Insulated Callenders' Construction Co Ltd* 1973 SLT 2 and *Bowes v Sedgefield District Council* [1981] ICR 234.

196. In *Larner* the employer had not sought to discharge that burden; so the critical issue was whether the workplace was safe. This raised two questions. The first was whether the word "safe" meant "safe from a reasonably foreseeable danger", so that a workman injured at his place of work by an accident which the employer could not reasonably foresee was unable to succeed in a claim for breach of statutory duty. The second question was whether, if so, the danger was reasonably foreseeable on the facts.

197. Peter Gibson J answered the first question no. He did so convincingly and with clarity, by reference both to the language of section 29 and to the authorities. He said this at p 562:

> "I start by considering the words of section 29(1) apart from authority. They contain no express reference to foreseeability, reasonable or otherwise. 'Safe' is an ordinary English word and I cannot see any reason why the question whether a place of work is safe should not be decided purely as a question of fact, without putting any gloss on the word: see *Munkman, Employer's Liability,* p 292. Further, to imply words in the section so as to introduce a test of reasonable foreseeability is to reduce the protection afforded by the Act of 1961 for the workman, the plain object of the section being to provide for a safe working place: see *Nimmo v Alexander Cowan & Sons Ltd* [1968] AC 107, 122, per Lord Guest. On principle and on

authority that is impermissible: see *John Summers & Sons Ltd v Frost* [1955] AC 740, 751, per Viscount Simonds. This is not unfair on the employer whose duty to make and keep the working place safe is qualified by 'so far as is reasonably practicable,' and I see no necessity to imply any other qualification. It would also seem wrong to me to imply a requirement of foreseeability, as the result will frequently be to limit success in a claim for breach of statutory duty to circumstances where the workman will also succeed in a parallel claim for negligence; thus it reduces the utility of the section.

[Counsel] accepted that there was no authority that compels us to conclude that section 29 requires such a test and in *Robertson v RB Cowe & Co*, 1970 SLT 122 an argument that the test of reasonable foreseeability applied to section 29(1) was specifically rejected by the First Division of the Inner House of the Court of Session. However, [counsel] referred us to a number of other authorities in which the reference to safety in section 29 and other similar statutory provisions has been construed as importing the test of reasonable foreseeability. These authorities are based on certain comments by Lord Reid in the *John Summers* case [1955] AC 740 on the meaning of 'dangerous' in section 14(1) of the Factories Act 1937. That subsection imposed the duty that 'Every dangerous part of any machinery … shall be … fenced.' Lord Reid referred, at pp 765–766, to what du Parcq J said in *Walker v Bletchley Flettons Ltd* [1937] 1 All ER 170, 175:

> 'a part of machinery is dangerous if it is a possible cause of injury to anybody acting in a way in which a human being may be reasonably expected to act in circumstances which may be reasonably expected to occur' - and queried the word 'possible,' adding – 'If the question of degree of danger has to be considered it might perhaps be better to say 'a reasonably foreseeable cause of injury''.

These comments on the meaning of 'dangerous' in that provision which contains no qualification of reasonable practicability have, surprisingly, been relied on in obiter comments on the meaning of its antonym 'safe' in section 29 of the Act of 1961 and other similar provisions notwithstanding that they do contain such a qualification."

198. Peter Gibson J then noted that the views to the contrary by Diplock LJ in *Taylor v Coalite* were obiter and expressed before the decision in *Nimmo*, where Lord Guest said this at p 122:

> "To treat the onus as being on the pursuer seems to equiparate the duty under the statute to the duty under common law, namely, to take such steps as are reasonably practicable to keep the working place safe. I cannot think that the section was intended to place such a limited obligation on employers."

Peter Gibson J referred to three conflicting Scottish cases, namely *Keenan v Rolls-Royce Ltd* 1970 SLT 90, *Robertson v RB Crowe & Co* 1970 SLT 122 and *Morrow v Enterprise Sheet Metal Works (Aberdeen) Ltd* 1986 SLT 697. He concluded that on the then state of the authorities the court was free to choose whether to apply the test of reasonable foreseeability. In agreement with Hirst LJ he said that he preferred to read the section without implying any such test. I entirely agree with both the approach of Peter Gibson J and with his reasons, which he put very clearly.

199. Section 14 was in significantly different terms from section 29(1). It provided, so far as relevant:

> "(1) Every dangerous part of any machinery … shall be securely fenced unless it is in such a position or of such construction as to be as safe to every person employed or working on the premises as it would be if securely fenced. …"

It is noteworthy that there was no reference in section 14 either to reasonable foreseeability or to reasonable practicability.

200. In *Mains v Englebert Tyres*, which was a decision of the Inner House, both Lord Sutherland and Lord Johnston convincingly rejected the suggestion that section 29 should be construed by reference to the construction of section 14. The Lord Ordinary had rejected the pursuer's case on the basis that the accident had not been reasonably foreseeable. The Inner House, comprising Lord Sutherland, Lord Johnston and Lord Wylie allowed the pursuer's appeal. They rejected the argument that reasonable foreseeability was a necessary prerequisite in the determination of whether or not a place of work was made and kept safe within the meaning of section 29(1).

201. Lord Sutherland, with whom Lord Wylie agreed, analysed the authorities in some detail at pp 521 to 530. He agreed with the decision in *Larner*. At pp 530 to 531 he expressed his reasons, both as to the meaning of safe and as to the scope of the defence of reasonable practicability. In short, he concluded that reasonable foreseeability was not relevant to the question whether the workplace was safe but was relevant to the question whether it was reasonably practicable for them to prevent the breach. He said this:

> "In my opinion, the construction of section 29(1) must depend upon the wording of that section itself. Since *Nimmo* the obligation under the section must be read as being that every working place shall be made and kept safe. If that obligation has not been met then it may be open to the employers to invoke the qualification that it was not reasonably practicable for them to prevent the breach and it may well be that reasonable foreseeability has a part to play in that. As considerations of reasonable practicability involve weighing the degree and extent of risk on the one hand against the time, trouble and expense of preventing it on the other, quite clearly foreseeability comes into the matter as it is impossible to assess the degree of risk in any other way. To that extent I agree that reasonable foreseeability can play its part in a consideration of section 29(1) but only at the later stage of considering whether the employers have discharged the *onus* upon them of showing that there were no reasonably practicable precautions which could have been taken. The initial part of the section is, in my view, clear. The duty is to make the working place safe. That means that there is a duty to prevent any risk of injury arising from the state or condition of the working place. There is nothing whatever in the section to suggest that the obligation is only to prevent any risk arising if that risk is of a reasonably foreseeable nature. Had that been the intention of Parliament it would have been perfectly simple for Parliament to have said so. If the duty had only been to take reasonably practicable precautions against reasonably foreseeable risks it is difficult to see how this section would have added anything of substance to the common law. Where the statute is designed to protect the safety of workmen it is, in my view, not appropriate to read into the statute qualifications which derogate from that purpose. It cannot be said that this reading of section 29 imposes an intolerable or impossible burden upon employers. They have the opportunity of establishing that there were no practicable precautions which could have been taken to prevent their breach of obligation. If they can do so they have a complete answer both to civil and criminal liability even though they are prima facie in breach of their obligation. This puts section 29 into an entirely different category from section 14 and I see no legitimate reason for forcing a construction upon section 29 which its plain words will not bear just

because in the different context of section 14 the word 'dangerous' has been construed in a particular way."

202. Lord Johnston said this at pp 535 to 536, with particular reference to the relationship between sections 14 and 29:

> "… I do not consider that it is appropriate to equiparate section 14 with section 29, with particular reference to the line of authority construing the word 'dangerous' in section 14. In my opinion that issue arises under that section in order to determine the scope of the section in the particular instance and indeed whether it applies at all. Whether rightly or wrongly, accordingly, the fact that the courts have interpreted 'dangerous' under reference to reasonable foreseeability does not mean that necessarily the same criteria should apply when considering a different provision raising the questions of safety, particularly where that latter provision is qualified by a so called escape clause, viz reasonable practicability, and section 14, when it comes to breach, is absolute. I do not consider that it is appropriate to apply the law which limits or determines the scope of section 14 before considering a breach of it, to what constitutes a breach of section 29(1) under reference to safety or lack of it. I therefore consider that section 29(1) stands on its own and authorities relating to section 14 fall to be ignored. … While, as a matter of English language, 'safe' may be the converse of 'dangerous', in my opinion section 29 has to stand on its own and be construed as such."

203. I entirely agree with the reasoning of Lord Sutherland and Lord Johnston in those passages. In doing so, I do not conclude that "safe" is not the antonym of "dangerous" in the two sections, only that there is nothing in section 29 to introduce the principle of reasonable foreseeability into the meaning of "safe". I note in passing that, as Lord Mance says at para 67, the *Close* line of case law has received mixed academic commentary. It was criticised by Munkman in his article "The Fencing of Machinery" 1962 LJ 761, where he said at p 761 that "foreseeability" is not to be found in the Factories Act, that it is an alien importation from the law of negligence and that, since negligence is a lower standard of liability, to import its concepts would necessarily reduce liability under the statute. *Close* was also criticised by the authors of the 1970-72 Safety and Health at Work Report of the Committee chaired by Lord Robens. Appendix 7 reviewed the case law on statutory safety provisions. At para 7 on p 186, the authors criticised the *Close* line of case law as contrary to the interests of accident prevention. In my opinion, given that the section 14(1) cases are susceptible to criticism, even on their own terms, we should be cautious about transferring the rationale to other provisions, particularly when so many cases have decided that it is inappropriate to do so.

204. The language of section 29(1) to my mind shows that it is a results provision. That it provides that, subject to the defence of reasonable practicability, it requires that the workplace be and remain safe. Lord Johnston put it thus in *Mains* at p 536:

> "The obvious starting point in my opinion is that the wording of the section, putting aside the qualification, does not admit immediately any reference to reasonable foreseeability. The verb 'shall' is relentless and the phrase 'made and kept safe', if looked at on the basis of made and kept 'accident free', would immediately admit a construction so far as these words go that if an accident occurs within the workplace and related to it … the pursuer need prove no more. The defender then can raise the issue of reasonable practicability on any basis that he thinks fit."

205. Some reference has been made to sections 2 and 3 of the Health and Safety at Work etc Act 1974. Section 2(1) provides that it is the duty of every employer to ensure, so far as is reasonably practicable, the health, safety and welfare at work of all his employees and section 3(1) provides that it is the duty of every employer to conduct his undertaking in such a way as to ensure, so far as is reasonably practicable, that persons not in his employment who may be affected thereby are not thereby exposed to risks to their health or safety. In para 63 Lord Mance has made some reference to the decision of the House of Lords and to the speech of Lord Hope, with whom the other members of the House agreed, in *R v Chargot Ltd (trading as Contract Services)* [2008] UKHL 73, [2009] 1 WLR 1.

206. As I read Lord Hope's judgment in that case, the central issue was whether in prosecutions for breaches of those duties it was for the prosecution to prove the acts and omissions by which it was alleged there had been a breach of duty and, in particular, whether it was enough for it simply to assert that a state of affairs existed which gave rise to risk to health or safety: see the statement of the issues at para 15. This involved a consideration of the scope of the duties in paras 17 to 21. In para 17 Lord Hope noted that both sections provided for a duty to ensure certain things. He then asked what the employer must ensure and concluded:

> "The answer is that he is to ensure the health and safety at work of all his employees, and that persons not in his employment are not exposed to risks to their health and safety. These duties are expressed in general terms, as the heading to this group of sections indicates. They are designed to achieve the purposes described in section 1(1)(a) and (b). The description in section 2(2) of the matters to which the duty in section 2(1) extends does not detract from the generality of that duty. They describe a result which the employer

> must achieve or prevent. These duties are not, of course, absolute. They are qualified by the words 'so far as is reasonably practicable'. If that result is not achieved the employer will be in breach of his statutory duty, unless he can show that it was not reasonably practicable for him to do more than was done to satisfy it."

207. The same is true of section 29(1), as Lord Hope explained in para 18, by reference to *Nimmo*, to which I have already referred. He said that this method of prescribing a statutory duty was not new. As Lord Reid explained in the opening paragraphs of his speech in *Nimmo*, the steps which an employer must take to promote the safety of persons working in factories, mines and other premises are prescribed by a considerable number of statutes and regulations. Sometimes the duty imposed is absolute. In such a case the step that the statutory provision prescribes must be taken, and it is no defence to say that it was impossible to achieve it because there was a latent defect or that its achievement was not reasonably practicable. In others it is qualified so that no offence is committed if it was not reasonably practicable to comply with the duty. Sometimes the form that this qualified duty takes is that the employer shall do certain things, of which Lord Hope gave a number of examples. He added that sometimes the statute provides that the employer must achieve or prevent a certain result. He concluded thus:

> "Section 29(1) of the Factories Act 1961, which was considered in *Nimmo*, took that form. So too do sections 2(1) and 3(1) of the 1974 Act. It is the result that these duties prescribe, not any particular means of achieving it."

208. So the House of Lords recognised in *Chargot* that section 29(1) prescribed a certain result, namely that the workplace must be kept safe, subject of course to the employer showing that it was not reasonably practicable to do so. Lord Mance, however, relies upon para 27 of Lord Hope's speech, where he said this:

> "The framework which the statute creates is intended to be a constructive one, not excessively burdensome. … The law does not aim to create an environment that is entirely risk free. It concerns itself with risks that are material. That, in effect, is what the word 'risk' which the statute uses means. It is directed at situations where there is a material risk to health and safety, which any reasonable person would appreciate and take steps to guard against."

It is important to note that there is a distinction between the language of sections 2 and 3 of the 1974 Act on the one hand and section 29 of the 1961 Act on the other. As I read it, para 27 does not detract from Lord Hope's previous statement at para

17 that the obligation to achieve the statutorily prescribed result is absolute. Rather, it is by analysing the result prescribed by sections 2 and 3 of the 1974 Act by reference to the use of the word risk that he imports the notion of relativity, namely that the result is to protect against material risks. Given the difference between the wording of the sections, I am not persuaded that the reasoning in para 27 is applicable to section 29(1) of the 1961 Act.

209. Both Lord Mance and Lord Dyson (at paras 64 and 111 respectively) refer to passages from the speeches of Lord Nicholls and Lord Hobhouse in *R (Junttan Oy) v Bristol Magistrates' Court* [2003] UKHL 55, [2003] ICR 1475, again to the effect that safety is a relative concept. The issue was whether there was any difference between the standards set by the Machinery Directive 98/37/EC and those set by the 1974 Act. Both require machinery to be "safe". It was in the context of the discussion of that issue that Lord Nicholls said at para 22:

> "Section 6(1)(a) of the 1974 Act imposes a duty to ensure, so far as is reasonably practicable, that machinery is so designed and constructed that it will be safe. The effect of regulations 11 and 12(1)(e) of the 1992 Regulations is to prohibit the supply of machinery which is not 'in fact safe'. So far there is no difficulty. But 'safe' is not an absolute standard. There may be differences of view on whether the degree of safety of a particular piece of machinery is acceptable. Unlike the 1974 Act, the 1992 Regulations define what is meant by safe. At once there may be room for argument that the standards set by the Act and the Regulations are not necessarily the same. This in itself is not satisfactory. As already noted, the inhibiting effect of differently-worded provisions having much the same result was one of the matters the Machinery Directive was specifically intended to eradicate: see recital 6 in the preamble."

To my mind, that statement reads as an acknowledgment that the use of the word safe in different statutory contexts can mean different things, not, as Lord Mance suggests at para 64, that safety is always a relative concept, at any rate if so to construe it is to import the notion of reasonable foreseeability.

210. Finally, Lord Mance refers at para 68 to *Robb v Salamis (M&I) Ltd* [2006] UKHL 56, [2007] ICR 175 in support of the proposition that reasonable foreseeability is generally accepted to be relevant to determining the standard of safety required across the health and safety legislation. In that case, Lord Hope confirmed the relevance of reasonable foreseeability to regulations 4 and 20 of the Provision and Use of Work Equipment Regulations 1998 (SI 1998/2306). However, as Lord Hope makes clear at para 3 of his judgment, the starting point for his analysis is the words of the regulations. Regulation 4(1) requires the work

equipment to be "suitable" and regulation 4(4) provides that "suitable" in that regulation means suitable in any respect which it is reasonably foreseeable will affect the health and safety of any person. It thus contains an express reference to reasonable foreseeability. So it must be queried how far, if at all, this case supports the general argument that reasonable foreseeability is relevant in health and safety legislation in the absence of express words used in the statute.

211. I agree with Lord Mance and Lord Dyson (at paras 60-61 and 111 respectively) that, given the divergent strands of authority and the differences of opinion identified in the cases, it is relevant to have regard to considerations of policy in construing section 29(1). Such considerations seem to me to point away from importing the concept of reasonable foreseeability into the meaning of "safe". The critical first question in every case under section 29(1) is whether the workplace was in fact safe for the employee. The purpose of the section is to protect the employee not the employer. This is plain from the unqualified use of the word "safe". Moreover it makes sense. First, the employer is in a much better position to obtain insurance against unforeseeable risks than the employee. Secondly, the employer, and industry more broadly, are better placed to investigate and identify risks to health and safety. As I see it, one of the purposes of such legislation is to provide every incentive for employers to do precisely that. Thirdly, in section 29, the balance between the employer and the employee is struck by the reasonable practicability defence, which itself imports considerations of reasonable foreseeability. Fourthly, it is no doubt for these reasons that, when commenting on the distinction between breach of statutory duty and negligence, the editors of the 14th edition of *Munkman* say at para 33 that it is not generally necessary to establish foresight of harm or fault on the employer's part to establish breach of statutory duty. These are essentially the considerations that Peter Gibson J had in mind in the passage from his judgment in *Larner* at p 562 quoted above.

212. Finally, I note that at para 61 Lord Mance expresses doubt as to whether section 29 can apply to a case of this kind if it imposes absolute liability. For my part I do not agree. Once it is accepted, as it is by Lord Mance at para 48, that a workplace can be rendered unsafe by operations constantly and regularly carried on in it, it would seem to me to follow that section 29(1) will cover any hazards created by such operations. The requirement is to achieve the result of safety, as opposed to safety from a particular hazard. It seems contrary to the clear wording of the statute to exclude from the scope of section 29 a category of hazard on the basis that the particular hazard was not in the mind of the draftsman. If noise can cause injury by damaging a person's hearing, then that workplace is unsafe for those who are working there. It does not matter that the hazard that renders a working environment unsafe was not contemplated at the time of the Act.

213. In any event, as explained above, section 29 does not impose absolute liability because the employer has a defence if he can establish that he took all

reasonably practical precautions, which involves a consideration of what risks are reasonably foreseeable. As stated above, the first question in each case is whether the workplace was safe. If the claimant proves that it was not, the second question arises, namely whether the employer has shown that, so far as reasonably practicable, it was safe for those working there. I agree with the reasoning in *Larner* and *Mains* that, in considering whether the employer has shown that, so far as reasonably practicable, it was safe it is relevant to consider whether it was reasonably foreseeable that it was unsafe. While (as demonstrated by Lord Dyson at para 125) the language could be construed more narrowly, I agree with Lord Sutherland's opinion expressed in the passage quoted above that, as considerations of reasonable practicability involve weighing the degree and extent of risk on the one hand against the time, trouble and expense of preventing it on the other, quite clearly foreseeability comes into the matter because it is impossible to assess the degree of risk in any other way. I also agree with Peter Gibson J to the same effect in the passage from *Larner* quoted above.

214. Those conclusions are consistent with the view expressed in the 14th edition of *Munkman* at para 5.89:

> "In considering what is practicable, account must be taken of the state of knowledge at the time. A defendant cannot be held liable for failing to use a method which, at the material time, had not been invented: *Adsett v K and L Steelfounders and Engineers Ltd* [1953] 2 All ER 320; nor for failing to take measures against a danger which was not known to exist: *Richards v Highway Ironfounders (West Bromwich) Ltd* [1955] 3 All ER 205."

That view is consistent with the view expressed by Smith LJ in the Court of Appeal at para 83 (and quoted by Lord Kerr at para 182 above) that it is "a matter of common sense [that], if the employer does not know of the risk and cannot reasonably have been expected to know of it, it cannot be reasonably practicable for him to take any steps at all".

Section 29 - the facts

215. I turn to the facts. Although I have discussed the meaning of "safe" in some detail because I regard it as a point of some general importance, I have reached the conclusion that the employers were liable on the facts, whatever the true meaning of "safe".

216. I agree with Lord Kerr's analysis of the facts. I agree with him (at para 155) that the Code of Practice of 1972 was the source of warning that noise levels of less than 90 dB(A) would damage some workers' hearing and that, thus alerted, an employer's obligation to remain abreast of information that would allow him to know what percentage of his workforce was likely to be affected was plain. In these circumstances there was a clear duty to keep abreast of developments, which included giving consideration to the information that became available in 1975 and 1976. That information would have led to the conclusion that a significant percentage of a workforce exposed to noise at levels greater than 85dB(A) would suffer a hearing loss. The judge made two unchallenged findings of fact of some importance: (1) that the information would have revealed that, when exposed to noise above the level of 85dB(A), the risk of suffering hearing loss accelerates up to 90dB(A) and in the high 80s, given long enough exposure, significant hearing loss may be expected in at least a substantial minority of individuals; and (2) that the evidence did not show that the cost of implementing a policy of voluntary hearing protection at levels below 90dB(A) was such that a reasonable employer could use cost or difficulty as a valid reason for not having such a policy. See Lord Kerr above at paras 157 to 159.

217. At paras 161 to 168 Lord Kerr considers in some detail the practice of employers of taking no steps in respect of levels below 90dB(A) in the light of the Code of Practice of 1972. I agree with his critique of the evidence of Mr Bramer, Mr Currie and Mr Worthington. I agree with his conclusion at para 165 that employers should have considered the data shortly after it became available in 1976 and, if they had, that they would have concluded that a significant minority would suffer hearing loss if exposed to noise levels exceeding 85dB(A) over a prolonged period. They would have discovered that this could be avoided by the provision of ear defenders at not unreasonable cost and that they would or should have provided their employees with ear defenders.

218. On the construction of section 29 preferred by Lord Mance and Lord Dyson, the correct conclusion on those facts is that it was reasonably foreseeable that if nothing was done a substantial minority of employees would suffer from significant hearing loss and that the workplace was therefore unsafe, from which it follows that the employers had not procured that it was safe. That conclusion is inconsistent with the conclusion both that the risk of sustaining damage was minimal and that the number of those affected was minimal. This is not a case of de minimis non curat lex. Nor is it a case in which the employers can rely upon the practice in industry, for the reasons given by Lord Kerr. It is clear that in these circumstances the employers could not successfully rely upon the defence that they had done what was reasonably practicable: see per Lord Kerr at paras 182 to 184 above.

219. On my construction of the meaning of "safe", on the judge's findings of fact there can be no doubt that the workplace was unsafe and the employers cannot rely upon the defence. They cannot show that it was not reasonably foreseeable that the workplace was unsafe and, for the reasons already given, they cannot show that they took all reasonably practicable steps to make it safe.

220. For these reasons, like Lord Kerr, I would dismiss the appeal on the basis that the employers were liable for breach of the duty contained in section 29 of the 1961 Act.

Liability at common law

221. The above conclusion makes it unnecessary to express a concluded view under this head. I was initially attracted by the employers' case that they were not in breach of duty having regard to the fact that they complied with the practice in the industry as set out in the 1972 Code. However, on reflection I am persuaded by the reasons in Lord Kerr's judgment. In doing so, I do not intend to depart from the principles stated by Swanwick J in *Stokes v Guest, Keen and Nettlefold (Bolts and Nuts) Ltd* [1968] 1 WLR 1776, 1783 and by Mustill J in *Thompson v Smith Shiprepairers (North Shields) Ltd* [1984] QB 405, 422, quoted by Lord Kerr at paras 156 and 166 respectively. It is appropriate for an employer to have regard to any relevant industry code, but, as Swanwick J put it, employers must give positive thought to the safety of their workers in the light of what they know or ought to know. I agree with Lord Kerr that an application of that approach would have led employers to take action long before they did. In this regard (as stated earlier) I agree in particular with Lord Kerr's critique of the expert evidence at paras 162 to 166 and with his conclusions at paras 166 to 168. In short, the employers should have given consideration to the risks posed to those exposed to levels of noise between 85 and 90dB(A). If they had they would have appreciated that a significant number of their employees would be exposed to significant hearing loss, which should (and perhaps would) have led to their making ear protectors available to their workforce.

Conclusion

222. For the reasons I have given I would dismiss the appeal.