Asbestos Exposure at the Workplace, Smoking Habits & Lung Cancer: Dutch Reflections on Employer Liability*

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1. Introduction

The case of *Heneghan* v. *Manchester Dry Docks Ltd & Ors* was the first case in which the England and Wales Court of Appeal had to rule on the question whether the Fairchild exception is applicable when several unrelated exposure sources to asbestos fibres may have caused lung cancer. The Fairchild exception implies a relaxation of the causation requirement in tort law, or, more precisely and to quote Lord Nicholls of Birkenhead in the landmark case: 'So long as it was not insignificant, each employer's wrongful exposure of its employee to asbestos dust and, hence, to the risk of contracting mesothelioma, should be regarded by the law as a sufficient degree of causal connection.' The case of *Fairchild* v. *Glenhaven Funeral Services Ltd* preceded the Dutch asbestos case *Nefalit* v. *Karamus*, in which the Dutch Supreme Court (*Hoge Raad*) faced what Lord Bingham called the 'rock of uncertainty' and followed the House of Lords' example, accepting a new rule, which was referred to in academic literature as the rule on proportional liability. The Dutch Supreme Court's decision is part of an important debate in legal

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¹ Court of Appeal 15 February 2016, Heneghan v. Manchester Dry Docks Ltd & Ors, www.bailii.org/ew/cases/EWHC/QB/2014/4190.html, para. 6.

House of Lords 22 June 2002, Fairchild v. Glenhaven Funeral Services Ltd, www.bailii.org/uk/cases/UKHL/2002/22.html, para. 42. With regard to the requirements for the application of the principle, see also Lord Rodger's opinion, para. 170.

³ Hoge Raad der Nederlanden 31 March 2006, Nefalit v. Karamus, deeplink.rechtspraak.nl/uit spraak?id=ECLI:NL:HR:2006:AU6092=NJ2011/250.

doctrine^{4,5} and legal practice, in which the application of this new rule has been suggested beyond cases concerning damage resulting from asbestos exposure at work, including for instance cases about asset management and risky financial products. The Dutch Supreme Court, however, in a series of subsequent judgments made it clear that restraint should be exercised with regard to the application of the new rule.⁶ This contribution will examine whether, having regard to the current

See among other things: A.J. AKKERMANS, Proportionele aansprakelijkheid bij onzeker causaal 4 verband. Een rechtsvergelijkend onderzoek naar wenselijkheid, grondslagen en afgrenzing van aansprakelijkheid naar rato van veroorzakingswaarschijnlijkheid (Deventer: W.E.J. Tjeenk Willink 1997); J.H. Nieuwenhuis, 'Disproportionele aansprakelijkheid', RMThemis (Rechtsgeleerd Magazijn Themis) 2006, p 177; S.D. LINDENBERGH, 'Longkanker door asbest en/of roken: proportionele aansprakelijkheid bij onzeker causaal verband', 55. AA (Ars Aequi) 2006, p 736; A.L.M. Keirse, 'Proportionele aansprakelijkheid bij blootstelling aan astbestvezels en tabaksrook', TVP (Tijdschrift voor Vergoeding Personenschade) 2006, p 66; J.S. Kortmann, 'Karamus/Nefalit: Proportionele aansprakelijkheid?', NJB (Nederlands Juristenblad) 2006, p 1404; I. Giesen, 'Proportioneel vermogensrecht: deining aan de Haagse kust', WPNR (Weekblad voor Privaatrecht, Notariaat en Registratie) 2006, p 645; C.J.M. KLAASSEN, 'Proportionele aansprakelijkheid: een goede of kwade kans?', NJB 2007, p 1346; I. Giesen & T.F.E. Tjong Tjin Tai, Proportionele tendensen in het verbintenissenrecht (Deventer: Kluwer 2008); B.C.J. van Velthoven & P.W. VAN WIJCK, 'Proportionele aansprakelijkheid vanuit ex ante perspectief', AV&S (Aansprakelijkheid, Verzekering & Schade) 2008, p 130; I. Giesen, '(Dis)proportionele duidelijkheid', NTBR (Nederlands Tijdschrift voor Burgerlijk Recht) 2011, p 149; S.D. LINDENBERGH & S.B. Pape, 'Proportionele aansprakelijkheid bij onzeker causaal verband: deel 2', AA 2011, p 720; A.J. AKKERMANS & CHR. H. VAN DIJK, 'Proportionele aansprakelijkheid, omkeringsregel, bewijslastverlichting en eigen schuld: inventarisatie van de stand van zaken', AV&S 2012, p 157; C.J.M. Klaassen & J.S. Kortmann, Causaliteitsperikelen (Deventer: Kluwer 2012); T. Hartlief, 'Proportionele aansprakelijkheid voor juristen en echte wetenschappers', NJB 2013, p 289; A.G. Castermans & P.W. den Hollander, 'Proportionele aansprakelijkheid, artikel 6:101 BW en de leer van de kansschade', NTBR 2013, p 185; C.J.M. Klaassen, 'Kansschade en proportionele aansprakelijkheid: volgens de Hoge Raad geen zijden van dezelfde medaille', AV&S 2013, p 119; J.M. EMAUS & A.L.M. KEIRSE, 'Proportionele aansprakelijkheid en veroorzakingswaarschijnlijkheid', MvV (Maandblad voor Vermogensrecht) 2013, p 129; J.C.J. Wouters, 'Proportionele aansprakelijkheid, kansschade en verlies van een kans in het Nederlandse aansprakelijkheidsrecht (I)', WPNR 2013, p 333; J.C.J. Wouters, 'Proportionele aansprakelijkheid, kansschade en verlies van een kans in het Nederlandse aansprakelijkheidsrecht (II, slot)', WPNR 2013, p 351; T.F.E. Tjong Tjin Tai, 'Schadebegroting, verlies van een kans en proportionele aansprakelijkheid', NJB 2016, p 2239; R. L.M. Cox, 'Proportionele aansprakelijkheid versus kansverlies - Tussen dogmatiek en praktijk', NTBR 2016, p 271.

Three PhD theses have been written on liability for asbestos-related injuries: R.F. Ruers, Macht en tegenmacht in de Nederlandse asbestregulering (Den Haag: Boom Juridische uitgevers 2012); F. Sobczak, Liability for Asbestos-Related Injuries (Maastricht: Universitaire Pers 2013); E. De Kezel, Asbest, gezondheid en veiligheid. Ontwikkelingen in het aansprakelijkheidsrecht (Antwerpen: Intersentia 2013). And already in 2009 Waterman published her comparative study on 'Employers' liability for occupational accidents and diseases': Y.R.K. Waterman, De aansprakelijkheid van de werkgever voor arbeidsongevallen en beroepsziekten. Een rechtsvergelijkend onderzoek (Den Haag: Boom Juridische uitgevers 2009).

⁶ See para. 3.3.

state of development of Dutch law, the outcome in the case of *Heneghan* v. *Manchester Dry Docks Ltd & Ors* would have been the same if it had been decided on the basis of Dutch law.

This contribution starts with a short explanation of the legal basis for liability of the employer (section 2). In section 3, the Dutch Supreme Court's 'rule on proportional liability' (*proportionele aansprakelijkheid*) will be introduced. Subsequently, the calculation of the amount of the compensation will be discussed (section 4). The contribution ends with conclusions that will be outlined in section 5.

2. Employer Liability in the Dutch Civil Code

In the Netherlands, the legal relationship between an employer and an employee is governed by a special regime in Book 7 of the Dutch Civil Code (Burgerlijk Wetboek; DCC). Article 7:658 section 1 DCC includes the duty of the employer to create a safe workplace. This duty is aimed at preventing damage and relates to the layout of the workplace, the maintenance of tools and machinery, the provision of instructions, and adopting the measures necessary to prevent damage. Following this duty, an employer is liable for the damage suffered by an employee in the course of his work on the basis of section 2 of Article 7:658 DCC. According to section 2, an employer can escape liability if he proves that he did fulfil his duty and created a safe workplace. This rule implies that the risk of non-persuasion with regard to the fulfilment of his duty of care as described in section 1 rests with the employer. An employee must substantiate his claim that the employer breached his duty, 7 and state and prove that he has suffered damage in the course of his work. 8 Article 7:658 DCC shifts the risk of non-persuasion with regard to the breach of the employer's duty on the employer. 9 The employee, however, still has to prove the causal link between his employment duties and the damage.

For occupational diseases in particular, the Dutch Supreme Court in 2000 accepted that the criterion of a causal link between illness and exposure to harmful substances has presumably been met if an employee, during work, has been exposed to a harmful substance and the exposure may have caused the health problems. This rule of reversal ('arbeidsrechtelijke omkeringsregel'), however, only applies when an employee can prove that the working conditions might have

⁷ I. Giesen, Bewijs en aansprakelijkheid (Den Haag: Boom Juridische uitgevers 2001), p 169.

⁸ Ibid., pp 168-169.

⁹ *Ibid.*, pp 168-169.

O Hoge Raad der Nederlanden 17 November 2000, Unilever v. Dikmans, http://deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:HR:2000:AA8369=NJ2001/596; Hoge Raad der Nederlanden 23 June 2006, Havermans v. Luyckx, deeplink.rechtspraak.nl/uitspraak?id=ECLI: NL:HR:2006:AW6166=NJ2011, 252; Hoge Raad der Nederlanden 9 January 2009, Landskroon v. BAM, deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:HR:2009:BF8875=NJ2011/252.

caused health problems and moreover that the link between the working conditions and the health problems is sufficiently plausible. 11

The rule of reversal, however, does not help the employee who suffers from lung cancer and has been exposed to asbestos fibres at the workplace, since the link between asbestos exposure at work and lung cancer is not sufficiently plausible. ¹² In cases of asbestos exposure at work proving legal causation may be impossible, in particular when an employee has been exposed to asbestos at other places as well, as was the case in *Heneghan* v. *Manchester Dry Docks Ltd and Ors*, or when the employee himself caused the damage or contributed to the occurrence of the damage, as was also the case in *Heneghan* v. *Manchester Dry Docks Ltd and Ors* and also in the Dutch landmark case *Nefalit* v. *Karamus*. As stated in both cases, it is impossible in the present state of scientific knowledge, to determine what the exact cause of lung cancer is.

3. The Dutch Supreme Court's rule on proportional liability

3.1. Nefalit v. Karamus: Facts, Court Proceedings and the Dutch Supreme Court's Considerations

To meet the employee in this impossible situation, the Dutch Supreme Court in 2006 in the case of *Nefalit* v. *Karamus* accepted the 'rule on proportional liability'. ¹³ Claimants in this case were the beneficiaries to the estate of Karamus, who died from lung cancer on 11 January 2000. Karamus had been employed by Asbestona, a legal predecessor of Nefalit, from 1964 to 1979. He was exposed to asbestos fibres. He also was, however, a smoker. Karamus smoked cigarettes for at least 28 years. Both the exposure to asbestos fibres and Karamus' smoking habits may have caused the lung cancer.

The claimants sued Nefalit and requested a declaratory decision stating that Nefalit had violated safety standards. The claimants also claimed damages for the pecuniary and non-pecuniary damage that had arisen as a result of Nefalit's failure. The sub-district court ruled that Nefalit had failed imputably and was liable for

¹¹ Hoge Raad der Nederlanden 7 June 2013, SVB v. Van de Wege, deeplink.rechtspraak.nl/uitspraak? id=ECLI:NL:HR:2013:BZ1717=NJ2014/98; Hoge Raad der Nederlanden 7 June 2013, Lansink v. Ritsma, deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:HR:2013:BZ1721=NJ2014/99.

¹² See in this respect e.g. Chr H van Dijk, 'De Hoge Raad stemt in met het leerstuk van proportionele aansprakelijkheid', NTBR 2006/44.

Hoge Raad der Nederlanden 31 March 2006, Nefalit v. Karamus, deeplink.rechtspraak.nl/uit spraak?id=ECLI:NL:HR:2006:AU6092=NJ2011/250. Previously Akkermans had discussed the doctrine of proportional liability extensively in his dissertation published in 1997 and suggested different legal bases for proportional liability under Dutch law. See: A.J. Akkermans, Proportionele aansprakelijkheid bij onzeker causaal verband.

compensation.¹⁴ However, the sub-district court also decided that Nefalit was obliged to pay only 55% of the pecuniary and non-pecuniary damages: to cover the increase of Karamus' risk of developing lung cancer as a consequence of the asbestos exposure at work, or, as stated subsequently, for the chance that the asbestos exposure had caused the lung cancer. The sub-district court based its decision on Article 6:101 DCC, which is the basis for mitigation of damages due to contributory negligence.

The court of appeal upheld the judgment of the sub-district court. ¹⁵ The court of appeal, among other things, rejected Nefalit's defence that they did not fail to fulfil their obligation to take the safety measures as were reasonably considered necessary. According to the court of appeal this must be assessed on the basis of Article 7:658 DCC, which means, as stated in section 2, that the employer, Nefalit, must prove that they had fulfilled their duty and created a safe workplace. Nefalit did not succeed in producing evidence in this regard. The court of appeal furthermore stated that, although Nefalit did not know at the time that exposure to asbestos could cause lung cancer, Nefalit had failed to fulfil their duty to take the safety measures to protect Karamus against known hazards. This failure caused a significant increase of risk of lung cancer for which the employer can be held liable.

The appeal to the Dutch Supreme Court first of all concerned the assessment of Nefalit's alleged wrongful behaviour. The Dutch Supreme Court stated that it was sufficiently clear from the court of appeal's judgment that the court of appeal on the basis of a report had reached the conclusion that Nefalit had failed to fulfil their duty. Furthermore, the failure to protect against known hazards can also be ground for liability against unknown hazards if the failure increased the likelihood of the risk manifesting itself. The Dutch Supreme Court then arrived at the fundamental question if the district court had properly held that Nefalit was 'proportionally liable' (proportioneel aansprakelijk).

The Dutch Supreme Court started its reasoning with the observation that the case at hand concerned the liability of an employer for exposure to a harmful substance during the performance of work, which exposure may cause health problems. The court of appeal had rightly concluded, said the Dutch Supreme Court, that the employer had failed to fulfil his obligations arising from Article 7:658 DCC. It was, however, not possible to determine the exact cause of Karamus' illness. The Defendant Nefalit in this regard and by way of defence had argued that it was more probable that the Karamus' smoking habits had caused the lung cancer. The

¹⁴ Rechtbank Almelo (kantonrechter) 17 December 2002, *Karamus* v. *Nefalit* (not published). Known from: Hoge Raad der Nederlanden 31 March 2006, *supra* n. 3.

¹⁵ Hof Arnhem 6 July 2004, Nefalit v. Karamus, Jurisprudentie Arbeidsrecht (JAR) 2004/185.

¹⁶ Hoge Raad der Nederlanden 31 Mar. 2006, supra n. 3, para. 3.13.

¹⁷ Ibid., para. 3.13.

¹⁸ Ibid., para. 3.13.

Claimant and defendant moreover agreed that the lung cancer had been caused by other conditions or by a combination of one or more circumstances mentioned. The Dutch Supreme Court noted that in these circumstances it is most reasonable to appoint an expert to inform the court about the probability of the illness having been caused by the exposure to asbestos at work. 19 If, on the one hand, there is only a small chance that this is the case, the claim should be rejected, said the Dutch Supreme Court. And if, on the other hand, there is a very good chance that the exposure at work is the cause of the illness, the claim should be awarded. When neither is the case, it is, according to the Dutch Supreme Court, unacceptable for one of the two parties to bear the entire damage. ²⁰ This would be unacceptable from the perspective of the employee, since the employer did fail to fulfil his obligations aiming to protect against damage to health. On the other hand and from the perspective of the employer it would not be fair to order him to pay full compensation, as there was a significant chance that it was not the exposure at work, or another factor that cannot be attributed to the employer, that had caused the lung cancer. 21

3.2. The Rule on Proportional Liability and Its Legal Basis

The foregoing led the Dutch Supreme Court to accept a rule that is referred to as the 'rule on proportional liability'. ²² The Dutch Supreme Court argued that a court under the circumstances mentioned in section 3.1 may order an employer to pay full compensation with a reduction in proportion to the extent to which the circumstances attributable to the employee, based on a motivated estimate, have contributed to his damage. The Dutch Supreme Court, to this end, referred to the principle of reasonableness and fairness and also to 'the principles underlying Articles 6:99 and 6:101 DCC'. ²³ This is one of the three options that Akkermans in 1999 suggested to serve as a legal basis for proportional liability. ²⁴

The former provision aims at regulating the situation in which more than one event may have caused the damage and the persons responsible for the

¹⁹ Ibid., para. 3.13.

²⁰ Ibid., para. 3.13.

²¹ Ibid., para. 3.13. See for a critical reflection on these considerations: J.H. Nieuwenhuis, RMThemis 2006, p 177.

See e.g. Hoge Raad der Nederlanden 14 December 2012, Nationale Nederlanden v. X and Y, deeplink.rechtspraak.nl/uitspraak?id=ECLI:NL:HR:2012:BX8349=NJ2013/236, para. 4.2. See on this case e.g.: J.M. Emaus & A.L.M. Keirse, 'The Netherlands', in K. Oliphant & B.C. Steininger (eds), European Tort Law 2012 (Berlin: De Gruyter 2013), p 491.

²³ Hoge Raad der Nederlanden 31 Mar. 2006, supra n. 3, para. 3.13.

²⁴ A.J. AKKERMANS, Proportionele aansprakelijkheid bij onzeker causaal verband, p 447. See also: A.J. AKKERMANS, 'Grondslagen voor proportionele aansprakelijkheid bij onzeker causaal verband', in W. H. van Boom, C.E.C. Jansen & J.G.A. Linssen (eds), Tussen 'Alles' en 'Niets'. Van toedeling naar verdeling van nadeel, (Deventer: W.E.J. Tjeenk Willink 1997), p 106.

different events committed a violation of standards. When it is certain that one of the events did cause the damage, but it cannot be determined which one, the persons are jointly and severally liable. The latter provision deals with the situation in which circumstances, which can be attributed to the aggrieved party himself, contributed to the damage, i.e. contributory negligence. According to this provision, the damages awarded will be reduced:

in proportion to the degree in which the circumstances which can be attributed to each of them have contributed to the damage, provided that a different apportionment shall be made or the obligation to repair the damage shall be extinguished in its entirety or maintained if it is fair to do so on account of varying degrees of seriousness of the faults committed or any other circumstances of the case (emphasis added). ²⁵

To speak with Lindenbergh, the principles underlying Article 6:99 and 6:101 DCC are to meet the aggrieved party's inability to meet the standards of proof when the damage has different possible causes and to achieve a fair distribution of the damage between the person liable and the aggrieved party due to their respective theoretical responsibilities for the damage. Reither of these provisions are directly applicable however. Article 6:99 DCC requires that the parties who may have caused the damage all committed a violation of standards. This was not the case, as Karamus did not violate any standards. In other words, there was only one person who has committed a violation of standards that might have caused the damage. And Article 6:101 DCC only applies when the employee has contributed to the damage, which cannot be established precisely.

3.3. Further Clarification of the Rule and Its Scope of Application: Subsequent Case Law

After *Nefalit* v. *Karamus*, the Dutch Supreme Court in a series of judgments further clarified the rule on proportional liability and its scope of application. The Dutch Supreme Court in *Fortis* v. *X* and *Y* first of all explained that restraint should be exercised in applying the rule, since it may well be that a defendant who on the basis of the rule on proportional liability is ordered to compensate for part of the

²⁵ H. Warendorf e.a. (ed.), Warendorf Dutch Civil and Commercial Law Legislation (Deventer: Wolters Kluwer).

²⁶ S.D. Lindenbergh, 55. AA 2006 (736) p 739.

²⁷ A.S. Hartkamp & C.H. Sieburgh, Mr. C. Asser's handleiding tot de beoefening van het Nederlands burgerlijk recht / 6-II Verbintenissenrecht - De verbintenis in het algemeen, 2e gedeelte (Deventer: Kluwer 2013), no. 81.

²⁸ S.D. Lindenbergh, 55. AA 2006 (736) p 739.

damage, did not in fact cause any damage.²⁹ According to the Dutch Supreme Court, the rule may be applied in particular 'when the defendant has committed a violation of standards, when the chance that there is a causal link between the standard breached and the damage is not very small and the purposes of the standards breached and the nature of the violations of standards justify the application of the rule on proportional liability'.³⁰ In the case at hand, application of the rule was unacceptable, the Dutch Supreme Court concluded. This conclusion was based on the findings that the case concerned a breach of an investment manager's duty to warn his clients about financial risks and that the purpose of the standards breached was to protect from financial loss.³¹ Moreover, the court of appeal had concluded that the chance that a causal link existed was small.³²

In Nationale Nederlanden v. X and Y, a pregnant woman, X, had been involved in a car accident.³³ Shortly after birth, her newborn son, Y, developed respiratory distress syndrome (RDS). Y was given a blood transfusion and he received artificial respiration. A few months later, it became clear that Y had sustained brain damage (periventricular leukomalacia; PVL). X and Y sued the insurance company of the driver involved in the car accident and stated that the car accident had caused the brain damage. The insurance company by way of defence argued that the problems after birth had caused the injury. The district court found that both events may have caused the brain damage, applied the rule on proportional liability and ordered the insurance company to compensate for 50% of the damage. The court of appeal upheld the judgment and the Dutch Supreme Court endorsed the application of the rule on proportional liability. The Dutch Supreme Court changed how the rule was formulated, now stating that 'a court may order a defendant to pay damages in proportion to the probability, expressed as a percentage, that his violation of standards caused the damage'.³⁴ As noted in section 3.2., the rule initially said that a court may order an employer to pay full compensation with a reduction in proportion to the extent to which the circumstances attributable to the employee have contributed to his damage.³⁵

29 Hoge Raad der Nederlanden 24 December 2010, Fortis v. X and Y, deeplink.rechtspraak.nl/ uitspraak?id=ECLI:NL:HR:2010:BO1799=NJ2011/251.

³⁰ Hoge Raad der Nederlanden 24 December 2010, supra n. 29, para. 3.8.

³¹ Ibid., para. 3.10.

³² Ibid., para. 3.10.

³³ Hoge Raad der Nederlanden 14 December 2012, supra n. 22.

³⁴ Ibid.

This latter approach was criticized in academic literature, inter alia by Kortmann, who argued that the Dutch Supreme Court did leave the all-or-nothing approach, but, still, did not accept proportional liability. Kortmann stated that although Nefalit was ordered to compensate for part of the damage, this part was not proportional to their theoretical causal share in the occurrence of the damage. Also the Dutch Supreme Court did not refer to the rule as a rule on proportional liability. See J.S. KORTMANN, NJB 2006, p (1404) at 5.

Lastly, in the so-called '7 June judgments' two cases on employer's liability were at stake. ³⁶ These cases concerned claims for repetitive strain injuries (RSI) and organic psycho syndrome (OPS) respectively. In both cases the defendants, as an alternative defence, relied on the rule on proportional liability and argued that the claimant should at least bear part of the damage as there was a significant chance that the damage had not been caused by the employers' unlawful behaviour. In *Lansink* v. *Ritsma* the Dutch Supreme Court explicated that the court of appeal had disregarded the fact that the circumstances that may have caused the damage but were not work-related, were at the employee's risk. ³⁷ These circumstances include 'smoking habits, genetic predisposition, ageing and other external causes'. ³⁸

4. The Calculation of the Extent of the Damages³⁹

The Dutch Supreme Court in Nationale Nederlanden v. X and Y ruled that a court, when applying the rule on proportional liability, may order the wrongdoer to pay compensation in proportion to the chance that his unlawful conduct caused the damage. 40 This standard for the calculation of the extent of the damages, Keirse and I argued, relates to a standard that has been suggested to calculate damages when the rule on contributory negligence (Art. 6:101 DCC) applies. As mentioned in section 3.2, the rule on proportional liability in Dutch law is based on the principles underlying Articles 6:99 and 6:101 DCC. Article 6:101 DCC implies a two-part standard for apportionment, which I have quoted in section 3.2. The Dutch Supreme Court in 2012 explicitly ruled that the last part of this standard does not apply to the calculation of proportionality. This means that an equitable correction for reasons of fairness cannot give rise to an increase of the percentage for which the wrongdoer is held liable. 41 The first part of the standard, however, is informative, Keirse and I argued, for the calculation of the extent of the damage. 42 The first part says, as quoted and italicized in section 3.2, that once it has been established that there is mutual responsibility with regard to the occurrence of the damage, in principle the damage should be divided between the wrongdoer and the aggrieved party on the basis of a causal standard.

Hoge Raad der Nederlanden 7 June 2013, SVB v. Van de Wege, supra n. 11; Hoge Raad der Nederlanden 7 June 2013, Lansink v. Ritsma, supra n. 11. See on these cases e.g.: J.M. Emaus & A. L.M. Keirse, in European Tort Law 2013, p 449.

³⁷ Hoge Raad der Nederlanden 7 June 2013, Lansink v. Ritsma, supra n. 11, para. 4.3.2.

³⁸ Ibid., para. 4.3.2.

³⁹ This part is based on a contribution of Anne Keirse and the author in the Maandblad voor Vermogensrecht: J.M. EMAUS & A.L.M. KEIRSE, MvV 2013, p 129.

⁴⁰ Hoge Raad der Nederlanden 14 December 2012, supra n. 22, para. 4.2.

⁴¹ Ibid., para. 4.3.

⁴² J.M. Emaus & A.L.M. Keirse, MvV 2013, p (129) at 129.

In essence, the standard is about mutual causality (wederzijdse causaliteit). ⁴³ This standard can be made concrete using the probability of the different events having caused the damage as a guideline (veroorzakingswaarschijnlijkheid). Nieuwenhuis first suggested this in 1992. He took inspiration from the German provision on Mitverschulden, § 254 BGB and the interpretation given by the Bundesgerichtshof in 1969. The Bundesgerichtshof decided:

Trifft die Klägerin ein Mitverschulden, dann ist das Maß des K. und damit der Klägerin zuzurechnenden Mitverschuldens in erster Linie danach zu bestimmen, inwieweit der Schaden vorwiegend von dem einen oder dem anderen Teil verursacht worden ist; hierfür ist maßgebend, ob die Handlungsweise der einen Partei den Schaden nicht nur ermöglicht, sondern in wesentlich höherem Maße wahrscheinlich gemacht hat als das Verhalten der anderen Partei, wobei es nicht auf die zeitliche Reihenfolge ankommt, in der die Bedingungen, die den Schaden herbeigeführt haben, eingetreten sind.

Taking this probability as a guideline means that it must be determined to what extent, based on a motivated estimate, the different events have contributed to the occurrence of the damage.

Transposing this approach to cases in which the rule on proportional liability may be applied, three elements determine the probability that different events have caused the damage. These elements are the factual probability, the relative probability and the *ex post* determination. The first element, the factual probability, is the starting point here, since it is the factual probability that we want to determine in the first place. In other words, the main goal is not to decide to what extent the damage can be *attributed* to the wrongdoer and the aggrieved party, it is *factual probability*.

The second element, the relative probability, implies that the probability that must be determined is the probability that the wrongdoer's unlawful behaviour caused the damage, taking into account that the damage did occur and that there is another potential cause. ⁴⁶ The probability that the asbestos exposure at work had caused damage, which was 55%, must be assessed against the probability that Karamus' smoking habits had caused damage, which was 68%. Nefalit, as a result, should have been ordered to compensate for 45% of the damage (55/(68 + 55)).

⁴³ Ibid., p (129) at 132.

⁴⁴ BGH 29 January 1969, *NJW* 1969, p (789) at 790. See: J.H. Nieuwenhuis, *Confrontatie en compromis: recht, retoriek en burgerlijke moraal* (Deventer: Kluwer 1992), p 82. And also: J.M. Emaus & A.L.M. Keirse, *MvV* 2013, p (129) at 133.

⁴⁵ J.M. Emaus & A.L.M. Keirse, MvV 2013, p (129) at 135.

⁴⁶ See also: S. Merab Samii & A. Keirse, 'Taxonomy of Asbestos Litigation in the Netherlands: Duelling with Causal Uncertainty', 21. *ERPL* 2013, p 341.

This second element of relative probability implies the third element, which says that the determination of the relative probability is an *ex post* rather than an *ex ante* determination. What counts is the fact that the damage did occur. Taking this as a starting point, what should be determined is the probability that the different events did cause the damage.

5. Dutch Reflections on Heneghan v. Manchester Dry Docks Ltd & Ors

If we go back to the case of Heneghan v. Manchester Dry Docks Ltd & Ors, it is important to recall that six employers were sued because Heneghan, who died from lung cancer, had been exposed to asbestos at the different workplaces. Heneghan, however, like Karamus also smoked. This raised the question, said Lord Justice Tomlinson: 'How should the law deal with the issue of causation as between the claimant and each defendant in these circumstances?' It is clear from the foregoing that the Dutch Supreme Court since the landmark case of Nefalit v. Karamus has not handled a case involving more than one defendant and a claimant, all of whom might have caused the damage. However, three observations are relevant for the purpose of determining the outcome of a case like Heneghan v. Manchester Dry Docks Ltd & Ors on the basis of Dutch law. First of all, it is clear that if there is a significant chance that Heneghan's smoking habits caused the lung cancer, it is not to be expected that Article 6:99 DCC on alternative causation applies. Secondly, the probability that the illness was caused by an individual defendant's violation of standards should neither be very small nor very large. This probability should represent the chance that the particular violation of standards had caused the damage, e.g. the chance that, given the particular exposure of the victim to asbestos, this would cause lung cancer, the 55% chance in the case of Nefalit v. Karamus. If this second condition is fulfilled, thirdly, like in Nefalit v. Karamus, the solution lies in achieving a fair distribution of damage between the persons liable and the aggrieved party based on their respective theoretical and estimated responsibilities for the damage. It therefore seems plausible that the rule on proportional liability applies.⁴⁷

In light of the Dutch Supreme Court's current approach this means that compensation must be paid in proportion to the chance that the defendant's unlawful conduct caused the damage. Keirse and I argued that three elements should serve as guiding principles in this regard. These elements say that it is the factual and relative probability that different events have caused the damage that count. As a third element we argued that the determination should be *ex post* rather than *ex ante* oriented, since it the probabilities must be determined given the fact that the damage did occur.

⁴⁷ See: S.D. Lindenbergh, 'Annotation to HR 14 December 2012', NJ 2013/236.

Although the aforementioned approach of proportional liability has the great disadvantage that it is for the claimant to sue all persons who might have caused his damage individually, ⁴⁸ an individual defendant will never pay more than the part that relates to the chance that his unlawful behaviour caused the damage. This is particularly preferable in light of the fact that he might not have caused any of the damage at all.

6. Conclusions

The Dutch Supreme Court in 2006 accepted a rule on proportional liability to meet victims' impossibility to fulfil the criterion of causality. This decision gave rise to a large number of doctrinal reflections on this new rule, which represents a significant development in the Dutch law of obligations. It is self-evident that the way in which a rule is formulated affects how damages are to be calculated. Whereas the Dutch Supreme Court in the 2006 landmark case of Nefalit v. Karamus stated that 'a court may order an employer to pay full compensation with a reduction in proportion to the extent to which the circumstances attributable to the employee have contributed to his damage', in Nationale Nederlanden v. X and Y it stated that 'a court may order a defendant to pay damages in proportion to the probability, expressed as a percentage, that his violation of standards caused the damage'. In this contribution I have explained that what should be determined is the probability that the different events did cause the damage, taking as a starting point the fact that the damage did occur. In light of the current state of development of Dutch law as presented in the foregoing, I have concluded that a likely outcome in the case of Heneghan v. Manchester Dry Docks Ltd & Ors would be that the defendant would be found liable in proportion to the probability that his violation of standards caused the damage, thereby ta king into consideration that the damage did occur and that there are other potential causes.

⁴⁸ A.S. Hartkamp & C.H. Sieburgh, Mr. C. Asser's handleiding tot de beoefening van het Nederlands burgerlijk recht / 6-II, no. 81.