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Loss of a Chance in European Private Law

‘All or Nothing’ or Partial Liability in Cases of Uncertain Causation*

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Abstract: Victims who have suffered damage to person or property are often confronted with difficulties proving the link between the negligent behaviour of the person whose liability is alleged and the damage with the degree of probability required by law. The victims may, however, be able to prove that they have lost a chance to avoid the damage, a chance that had existed but for the negligence of the persons claimed to be liable. Under the legal concept of ‘loss of a chance’, the claimant’s loss of this opportunity or chance is itself treated as actionable damage, and the damage suffered is partially compensated in accordance with the chance lost. In many European countries, the idea of compensating for lost chances has not yet been accepted or has been rejected; in numerous other countries, the concept of loss of a chance has been widely accepted or has been accepted for certain categories of cases. The following contribution presents the state of the law in Europe, followed by a proposal to partially abandon the traditional ‘all or nothing’ principle in cases of uncertainty regarding causation and to compensate, under certain conditions, for damage according to the probability of causation. Arguably, the loss of a chance should be regarded not as a (new) category of damage but as an issue of alternative causation. This would allow for a distinction between liability for lost chances in contracts and torts, whilst at the same time avoiding the severity of the ‘all or nothing’ approach.

Resumé: Les situations dans lesquelles se pose la question de la « perte d’une chance » ont en commun que la personne tenue pour responsable a agi de manière illicite, mais que la victime n’est pas en mesure de prouver, avec la probabilité traditionnellement requise, un lien de causalité entre l’acte d’autrui et le dommage. L’acte commis par la personne tenue pour responsable a pourtant privé la victime d’une chance d’un résultat plus favorable. Selon la théorie de la « perte d’une chance », c’est cette « perte d’une chance » elle-même qui constitue le dommage et engage la responsabilité civile. Ce concept ne mène pas à une réparation selon le principe du « tout ou rien », mais à une réparation correspondant à l’étendue de la chance perdue. Dans de nombreux ordres juridiques européens, le concept de « perte d’une chance » n’est pas (ou n’est pas encore) accepté. Dans de nombreux autres, ce concept est soit accepté, soit il a, ces dernières années, gagné du terrain. La contribution suivante présentera l’état actuel du

* The following contribution is an extended and updated version of an article previously published in Causation in Law, ed. Lubos Tichy (Praag: Univerzita Carlova, 2007), 123–148; for an article in French, see THOMAS KADNER GRAZIANO, ‘La “perte d’une chance” en droit privé européen: “tout ou rien” ou réparation partielle du dommage en cas de causalité incertaine’, in Les causes du dommage, eds Christine Chappuis & Bénédict Winiger (Genève/Zurich/Bâle: Schulthess, 2007), 217 et seq.

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droit en la matière. Il sera ensuite proposé d’abandonner partiellement le principe du « tout ou rien » et d’indemniser, dans certaines situations, selon des probabilités de causalité. Pourtant, au lieu de qualifier la « perte de chance » de dommage engageant la responsabilité, dans la présente contribution, il est proposé d’appliquer des règles sur la causalité alternative pour résoudre le problème de causalité incertaine et de chances perdues. Ceci permettrait d’indemniser des victimes selon des probabilités de causalité tout en respectant les particularités respectives des régimes de responsabilité contractuelle et délictuelle.


1. Introduction

1. In the summer of 2008, the English press reported a case that clearly illustrates the legal issues for which the loss of chance theory is meant to provide a response:

In 2004, a BBC employee in Leeds, then twenty-five, noticed a dull ache in her knee which was giving her a burning sensation and a peculiar pain. After three months of frequent visits to her doctors, she asked her general practitioner (GP) to refer her to a specialist but was instead offered treatment for ligament damage. It took another three months and concern from a physiotherapist before she was given an X-ray and was diagnosed with osteosarcoma, a bone cancer that is most frequent in young and taller people (the woman is 5 feet 10 inches tall), and which is thought to be linked to rapid growth. Intensive chemotherapy failed to reduce the size of the cancer, and her only chance of survival was to have her right leg amputated.

Following the operation, the woman decided to take legal action against her GP, alleging medical malpractice leading to the loss of a limb. According to an oncologist cited by the newspapers, a six-month delay in the diagnosis unacceptably increases the likelihood of the cancer leading to amputation. According to the same


statement, it may, however, be difficult (probably even impossible) to establish if the patient would still have lost her leg had she been diagnosed sooner.

In cases like the one reported, the victims are often confronted with difficulties in proving the link between the negligent behaviour of the defendant and the damage suffered with the degree of probability required by law. In many of these cases, the victim has, however, lost a chance to avoid the damage, a chance he or she would have had if the diagnosis had been made promptly and he or she had received timely treatment.

2. With regard to compensation for lost chances and compensation for damage in situations of uncertain causation, the law (and, therefore, the outcome in similar cases) differs considerably from one European country to the next:

In France, a long line of judicial precedents has confirmed that the loss of a chance (or 'perte d'une chance') is compensable damage. Under the current proposal for reform of the French Civil Code, Article 1346 of the Code would provide that 'La perte d'une chance constitue un préjudice réparable distinct de l'avantage qu'aurait procuré cette chance si elle s'était réalisée'. (The loss of a chance is a compensable injury distinct from the advantage that the realization of the opportunity would have brought about.) In enacting this reform, the French legislator would thus be confirming the well-established 'perte d'une chance' case law of the French courts. In other continental systems, for example in Swiss law or in German law, neither the legislator nor the courts award compensation for the loss of a chance at present. In other countries, for example in England, compensation for lost chances is awarded in certain categories of cases but not in others.

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3 Starting with Cass. req. 17.7.1889, S 1891, 1, 1399; see for example, Le Tournneau, Droit de la responsabilité et des contrats, no. 1415 et seq. with further references; J.-S. Borghetti, in this volume with references.


5 English translation available online at: <http://www.henricapitant.org/IMG/pdf/Traduction_definitive_Alain_Levasseur.pdf>. This article should be read together with the basic rule on the conditions for liability, i.e., Art. 1343 which provides: 'Est réparable tout préjudice certain consistant dans la lésion d’un intérêt licite, patrimonial ou extra-patrimonial, individuel ou collectif'. ('Compensation is owed for any injury arising from harm to an interest that is licit, whether patrimonial or extra-patrimonial, whether individual or collective.').

6 See, for Switzerland, Ch. Müller, La perte d'une chance, no. 241 and 249; in a decision of 13 Jun. 2007, the Swiss Federal Court for the first time explicitly dealt with the issue of loss of a chance but, for procedural reasons, left the question open, BG/TF 13 Jun. 2007, 4A.61/2007, <www.bg.ch>; see the contributions of Widmer et al. in HAVE (2008) (supra, n. 1). For Germany, Reinhard Zimmermann, in Digest of European Tort Law, eds Winiger et al., 10.2.7: 'this idea [i.e., the loss of a chance] is practically non-existent in the case law of [German] courts'.

7 See the overview in Gregg v. Scott UKHL (2005): 2, no. 15.
The following contribution will first examine the different factual situations in which the issue of loss of a chance arises (II). This will be followed by an analysis of whether and to what extent loss of a chance is a causation issue (III). The traditional solutions to these problems will then be outlined (IV), followed by an introduction to the legal concept of loss of chance (V). Once the different approaches to the problem of uncertainty in relation to natural causation have been presented, this account will set out a comparative overview and will examine whether there are any current trends in European private law dealing with the uncertainty surrounding natural causation and loss of chance (VI). This overview will take into consideration the Principles of European Contract Law (or Lando Principles), the Draft Common Frame of Reference, the UNIDROIT Principles of International Commercial Contracts as amended in 2004, and the Principles of European Tort Law (PETL), published in 2005 by the European Group on Tort Law (VII), all of which have been elaborated on a wide comparative basis over the last decades. Finally, the arguments in favour of and against the different approaches to the problem of uncertainty of causation will be set out (VIII), and a future solution will be proposed (IX).

2. Situations in Which Loss of Chance Is an Issue

The factual situations in which loss of chance is an issue can be put into at least four different categories.  

2.1 The First Category: Lawyers’ Professional Liability

The first category concerns the liability of lawyers for mistakes in dealing with their clients’ affairs. A case that was decided by the Spanish Supreme Court in 2004 may serve as an illustration for this first category:

A woman worked as a secretary to the sales manager of a retail chain. She was notified that she was going to be transferred to another section, resulting in changes to her working hours and working conditions. Her lawyer failed to lodge her claim with the labour court within the necessary time period. As a consequence, the action brought on her behalf was dismissed.

The woman sued the lawyer seeking compensation for her financial loss consisting of the likely award of damages for breach of the employment contract and the subsequent unemployment benefits she would have been entitled to had the action been successful. It remains uncertain whether she would have won her case had the action been brought in time.  

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8 For further cases in which the loss of chance approach has been used in French law, see Le Tourneau, Droit de la responsabilité et des contrats, nos 1419 and 1422 et seq.; see also the case note on French law by J.-S. Borghetti in this volume.

9 Spanish Tribunal Supremo 9 Jul. 2004, Repertorio de Jurisprudencia Aranzadi (RJ)(2004): 5121, excerpts in Digest of European Tort Law, eds Winiger et al., 10.10.5 with comments by J.
In recent years, the courts in England, Scotland, the Netherlands, Denmark, Portugal, Germany, Spain, Austria and Switzerland have had to deal with similar cases in which lawyers had negligently failed to bring a claim or to launch an appeal in time or in which they had committed other professional mistakes that reduced a client’s prospects in winning a case.10

2.2 The Second Category: Liability for Medical Malpractice
The second category of cases concerns liability for medical malpractice. The case of the young BBC employee in Leeds, as well as another English case which has become the leading precedent in this area, provide illustrations of this second group of scenarios: In the 1989 case of Hotson v. East Berkshire Area Health Authority,11 a 13-year-old boy fell from a tree in his school playground and sustained an acute traumatic fracture to his left hip joint. He was taken to hospital but his injuries were not correctly diagnosed and not adequately treated for several days. Later, the boy was found to be suffering from a disability (a vascular necrosis) in his hip joint, resulting

Ribot & A. Ruda; see also F. Solé Feliu, case note on Spanish law, in this volume with further references.

10 See, for example, the English cases: Allied Maples Group Ltd v. Simmonds & Simmonds WLR 1 (1995): 1602 (CA), excerpts in Digest of European Tort Law, eds Winiger et al., 10.12.5, with comment by K. Oliphant; Kitchen v. Royal Air Force Association WLR (1958): 563 (a solicitor’s negligence resulted in his client’s action for damages being time-barred; award of damages for loss of a chance); the Scottish case: Kyle v. P & J Stormonth Darling, 1993 SC 57, excerpts in Digest of European Tort Law, eds Winiger et al., 10.13.7 with comment by M. Hogg (solicitors failed to lodge an appeal in time and as a result the pursuer was unable to continue his action. He therefore brought an action against the solicitors claiming to have suffered loss as a result of their negligence. Held: The pursuer’s action was successful, and a hearing ordered to determine the value of the chance which the pursuer had lost. The Inner House commented: ‘the pursuer ... is right to claim damages for what he offers to prove he has lost, namely, the value of the lost right to proceed with his appeal in the original litigation. The pursuer will fail unless it is established that the lost right had an ascertainable, measurable, non-negligible value; but he is under no obligation, as a precondition of obtaining an award against the present defendants, to show that he would probably have succeeded in the original litigation’; the Dutch case: Hoge Raad 24 Oct. 1997, NJ (1998): 257 (Baijings/H.), excerpts in Digest of European Tort Law, eds Winiger et al., 10.8.7, with comment by W.H. Van Boom & I. Giesen; the Portuguese case: Lisbon Court of Appeal 8 Jul. 1999, according to Digest of European Tort Law, eds Winiger et al, 10.11.1, with comment by A. Pereira, held: liability for an amount of EUR 2,500 out of a damage of EUR 10,000 for having lost a 25% chance of recovering a debt; the Spanish cases: Tribunal Supremo (TS) 9 Jul. 2004 (supra, n. 9), and TS 26 Jan. 1999, RJ (1999): 323; the German cases: Federal Court of Justice/Bundesgerichtshof (BGH) 27 Jan. 2000, Versicherungsrecht (VersR) (2001) 638; BGH 2 Jul. 1987, Neue Juristische Wochenschrift (NJW) (1987): 3255; the Austrian case: Oberster Gerichtshof (OGH) 3 Nov. 1966, Amtliche Sammlung der Entscheidungen des OGH (SZ) 39/186; the Swiss case: Federal Court of Justice/Bundesgericht/Tribunal Fédéral (BG/TF) 12 Dec. 1961, BCE/ATF 87 I 364.

from insufficient blood supply to the epiphysis. Due to the disease, the boy was permanently disabled from the age of 20.

The defendant health authority admitted negligence but claimed that, at the time the plaintiff was taken to hospital, the boy’s disability was inevitable. Evidence shows that there was a 25% chance that a vascular necrosis would not have developed had the plaintiff been treated without delay.

Similar cases of uncertain causation in the field of liability for medical malpractice have been brought before the courts in France, Belgium, Germany, Austria, Italy, Spain, the Netherlands, Scotland, Ireland, Lithuania, Hungary and Switzerland.\textsuperscript{12}

\subsection*{2.3 The Third Category: Competition Cases}

In the third category, we find cases of competition in fields such as politics, business, sports and others, for example, beauty contests:


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In an Irish case, under a regulation that was later declared unconstitutional, a politician was precluded from standing in national and European elections. The politician claimed to have lost the chance of being elected.\(^{13}\)

In a German case, an architect was excluded from an architectural contest in an unjustified manner.\(^ {14}\)

In one Greek case, horses which were among the favourites to win were excluded from participating in horse races. The owners claimed compensation for being deprived of the prize money they would have won had the horses been able to participate.\(^ {15}\)

In Geneva, Switzerland, a candidate in the Miss Suisse competition was injured in a car accident. This made it impossible for her to participate in the contest.\(^ {16}\)

### 2.4 The Fourth Category

The fourth is a hybrid category. Examples are cases of lost or stolen tickets for lotteries or other cases in which the victim was hindered from participating in games of chance. A Greek case from 1987 can be cited as an example:

A person purchased a lottery ticket. During the lottery, one number was drawn twice. It was later discovered that, due to negligence on the part of the public bodies in charge, the plaintiff’s number was not included in the ballot box while the winning number was included twice. The bearer of the ticket filed an action claiming the amount of the higher prize or at least half of it.\(^ {17}\)

### 3. Loss of Chance – A Causation Issue?

All European liability systems require, as a starting point, a link of natural causation between the tortfeasor’s activity and the victim’s injury or damage. The tortfeasor’s activity needs to be a \textit{conditio sine qua non} of the victim’s injury or,  

\(^{13}\) Redmond v. The Minister for the Environment, 13 Feb. 2004, according to Digest of European Tort Law, eds Winiger et al., 10.14.1, with comments by E. Quill.


\(^{15}\) Areios Pagos (AP) 447/1957 (Sect. A') [1958] NoV 6, 102; AP 742/1958 (Sect. C') [1959] No V 7, 380; according to Digest of European Tort Law, eds Winiger et al., 10.5.1, with comments by E. Dacoronia; see also the French case: \textit{Cour d'appel de Paris} 21 Nov. 1970, Juris-classeur périodique. \textit{La semaine juridique} (JCP) (1970): Jur.16990: claim brought against a jockey who was considered to have negligently ceased to push the horse on the finish line; see also the Norwegian case: Court of First Instance 18 Oct. 1983, according to V. Ulfbeck & B. Askeland, in Digest of European Tort Law, eds Winiger et al., 10.16.1.

\(^{16}\) The case was covered by the local press in 2006 but was not brought before the courts.

\(^{17}\) Areios Pagos, 255/1986 [1987] No. V 35, 910, according to Digest of European Tort Law, eds Winiger et al., 10.5.6, with comments by E. Dacoronia.
in the words of Article 3:101 of the PETL: ‘An activity or conduct is a cause of the victim’s damage if, in the absence of the activity, the damage would not have occurred’.18

In the case concerning the Spanish secretary, the lawyer had negligently failed to bring a claim in time. However, it is uncertain whether the claim would have succeeded had it been brought in time.

In the second case in which the English boy fell out of the tree, the doctor had committed several mistakes. It is, however, impossible to know whether, if the boy had received immediate and adequate treatment, the disability would have been avoided.

In the third category of cases, it is impossible to know if the Irish politician would have won the election had he been able to participate. It is also impossible to know if the German architect would have won the contest, if the horses would have won the race in Greece or if the candidate from Geneva would have won the title of Miss Suisse had they been given the chance to participate.

The common features in all these cases are that the person held to be liable acted negligently (if negligence was required) and that the victim cannot show that the loss would have been prevented had the other party acted as required under a contract or by law. From this point of view, the victim cannot meet the requirements of the conditio sine qua non test, and the problem is one of causation.

4. Traditional Solutions

In European private law, several traditional solutions exist to strengthen the victim’s position in situations in which it is difficult for him or her to establish a link of natural causation between the damage and the negligent behaviour of the person held to be liable. For cases concerning the loss of a chance, there are at least four traditional ways to help the victim:

- The first solution is to clear up the question of causation ex post.
- The second solution is to lower the victim’s burden of proof.
- The third solution is to reverse the burden of proof.
- The fourth solution is an extensive application of the principle of alternative causality.

4.1 Dealing with Causation Ex Post

One solution would be to clear up the issue of causation afterwards (or ex post). In cases of negligence by lawyers, the issue of causation will usually be raised in a

18 Principles of European Tort Law: Text and Commentary, ed. European Group on Tort Law (Vienna/New York: Springer-Verlag, 2005), Art. 3:101; also in <www.egtl.org/>. 1017
second, subsequent proceeding, that is, an action for damages against the lawyer. In the second proceeding, the judge establishes - in a hypothetical manner - whether the lawyer’s negligence prevented the client from winning the first proceeding or whether the client would have failed regardless. The hypothetical outcome of the first proceeding is, therefore, a condition for the success of the client’s claim in the procedure against his lawyer. In possibly establishing some form of certainty in causation between the lawyer’s negligence and the client’s damage, the second proceedings will resolve the issue of loss of chance. One could consequently speak of ‘(first) proceedings within the (second) proceedings’.

This approach is applied consistently by the courts in Germany. It has also been used by the courts in the Netherlands and by the Austrian and by the Swiss courts.

4.2 Lowering the Burden of Proof

For cases falling into the first category, in which it appears impossible to totally resolve the causation problems on an ex post basis, as well as in cases belonging to the three other categories, other remedies are needed. Another remedy could be found in lowering the victim’s burden of proof as far as the causal link is concerned.

In some legal systems, for instance in Germany, it is necessary for the causal link to be established with certainty (‘Gewissheit’). In Swiss law, the victim must establish a sufficient (i.e., predominant) probability of the purported cause with regard to the effect (‘überwiegende Wahrscheinlichkeit’). In a case decided by the courts in Zurich, it was held sufficient

19 See, for example, BGH 9 Jun. 1994, Entscheidungen des Bundesgerichtshofes in Zivilsachen, amtliche Sammlung (BGHZ) 126, 217; see however: BGH 16 Jun. 2005, JZ (2006): 198: the court of the second proceedings decides on the basis of the information available in the second proceedings, with comments by Mächel; for further references, see Mächel, Chance und Schaden, 76 et seq. For a critical view on the German case law, see Mächel, ZEuP (2006): 656, at 674; ibid., JZ (2006): 198; ibid., Chance und Schaden, 76 et seq., 126.
20 Hoge Raad 24 Oct. 1997, NJ (1998): 257 (Baijings/mr. H.), excerpts in Digest of European Tort Law, eds Winiger et al., 10.8.7, with comments by W.H. Van Boom & I. Giesen; according to the Dutch case law, the court may also use the loss of chance approach; see W.H. Van Boom & I. Giesen, 10.8.9 et seq.
22 See, for example, Mächel, ZEuP (2006): 656, 674 et seq.; ibid., Chance und Schaden, 237 et seq.
23 § 286 of the German Code of Civil Procedure (Zivilprozessordnung, ZPO); for German law, see BGHZ 53, 245; BGH, NJW (1993): 935, at 937; Mächel, Chance und Schaden, 30 et seq., with further references; Bien, in this volume, 3.; Jansen OJLS (1999): 271, 276. For Austrian law, see Walter Rechberger & Daphne-Ariane Simotta, Grundriß des österreichischen Zivilprozessrechts, 5th edn (Wien: Manz’sche, 2000), n. 580, with references.
24 BG/TF 8 May 1981, BGE/ATF 107 II 269, cons. C. 1b. The burden of proof may vary according to the protected interest at issue; see Roland Brehm, Schweizerisches Zivilgesetzbuch,
for the causal link between a doctor’s negligence and the patient’s damage to be established with a probability of 60% (a testicular cancer was negligently diagnosed too late and the patient died). The courts awarded compensation at the rate of 60% of the damages (with respect to the apportionment of the award, this case remains exceptional in Swiss law).\textsuperscript{25} According to the dominant opinion in Switzerland, a mere ‘probability’ of causation is, on the contrary, not sufficient to establish a claim for the entire damages or part of the damages.\textsuperscript{26}

In cases of medical malpractice, the courts in Austria have also lowered the burden of proof of causation to that of a predominant probability in order to award compensation for the entire damage.\textsuperscript{27}

In English law it is necessary to establish that it is \textit{more likely than not} (i.e., that there is a probability of at least 51%) that a damage was caused by an act (or omission) of the defendant.\textsuperscript{28}

Probabilities below this line are, in principle,\textsuperscript{29} not sufficient proof of causation in any legal system. In none of our given examples can the victim satisfy the ‘more probable than not’ test, the ‘predominant probability’ test or the ‘certainty of causation’ test. According to these standards, all of the actions would have to be dismissed. This is true for the Spanish secretary’s claim against her lawyer, for the English teenager’s claim against his doctor and, obviously, for the claim by the candidate from Geneva for the Miss Suisse competition against the person who caused the traffic accident in which she was hurt.

\section*{4.3 Reversing the Burden of Proof}

Another solution would be to entirely reverse the burden of proof.
For patients’ claims against doctors who have acted with gross negligence, the German courts have reversed the burden of proof in favour of the patient, providing that the negligent act might have been the cause of the patient’s damage. In medical malpractice cases, the Dutch and Austrian courts as well as the Supreme Court of Lithuania have also reversed the burden of proof in cases of uncertain causation.

The German courts have extended these principles to other professions that aim at protecting others from dangers to life or health. According to the case law, a person who violates a contractual duty to provide information or to give advice carries the burden of proof to show that his act has not caused the damage or that even if the appropriate information had been given, the damage would still have occurred.

If the requirements for a reversal of the burden of proof are met, the courts in Germany, the Netherlands and Lithuania award damages, in principle, for the entire loss suffered by the victim even though causality remains uncertain. Given that in these cases, the issue of causation cannot be cleared up afterwards, reversing the burden of proof leads to the result that a doctor who has acted with gross negligence is liable for any and all consequences that have probably resulted from his act or omission.

In cases involving lawyers’ professional liability, the German courts have, on the contrary, refused to reverse the burden of proof even in cases of gross negligence on the part of the lawyer. Unlike a patient, the lawyer’s client would not be exposed to any existential risk. Furthermore, unlike in cases of medical malpractice, it would not be possible to systematically conclude from the lawyer’s negligence that there is a causal link between negligence and the client’s loss of his claim. The Swiss Federal Court of Justice has not reversed the burden of proving causation in lawyer’s

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31See for Dutch law, W. H. Van Boom & J. Giesen, in Digest of European Tort Law, eds Winiger et al., 10.8.5, with references; for Austrian law, Mäsch, Chance und Schaden, 158 et seq.; for Lithuanian law, 18 Feb. 2004 Supreme Court of Lithuania, civil case 3K-3-16/2004, according to Digest of European Tort Law, eds Winiger et al., 10.21.1, with comments by J. Kiršiene & S. Selelionyte-Drukteinienė.


33BGH 5 Jul. 1973, BGHZ 61, 118.

34For a critical assessment of the German case law, see Mäsch, ZEuP (2006): 656, at 674.


negligence cases either. Therefore, the client must establish a predominant probability of the lawyer’s negligence with regard to his losing his claim.37

4.4 Applying the Principles of Alternative Causation Extensively

A fourth way of resolving uncertainty in natural causation would be to apply the rules on alternative causation extensively. In 1995, the fourth senate of the Austrian Supreme Court of Justice had to decide on a case in which a baby had been born severely disabled. The disability was due either to the fact that the baby had had the umbilical cord wrapped around his neck three times when born, a fact that was unavoidable for the doctors, or that it was due to a placental insufficiency, a fact that the doctors should have discovered and the consequences of which they could have avoided. The fourth senate of the Supreme Court applied, by way of analogy, the rules on alternative causation. Given the fact that the doctors were responsible for one out of two potential sources of the baby’s damage, the court held them liable for half of the damage.38 However, other senates of the Austrian Supreme Court of Justice have not followed this line of reasoning and prefer to lower or to reverse the burden of proof in similar situations.39

5. Legal Concept of Loss of Chance

According to the loss of chance theory, the act that triggers liability in cases of uncertain causation is not the violation of a right that is traditionally the object of protection in contract law (such as the financial interests of the Spanish secretary in our first case) or in tort law (such as the bodily integrity of the teenager in the second case). The fact that triggers liability is the loss of the chance itself.40 In the words of Lord Nicholls in the English case Gregg v. Scott: ‘In order to achieve a just result in such cases the law defines the claimant’s actionable damage ... by the reference to the opportunity the claimant lost, rather than by reference to the loss of the desired outcome which was never within his control. ...The law treats the claimant’s loss of his opportunity or chance as itself actionable damage’.41

40 See, for example, O. Moréteau & L. Francoz-Terminal, in Digest of European Tort Law, eds Winiger et al., 10.6.3; Jansen, OJLS (1999): 271, 282 et seq.
In the case of the English teenager treated inadequately in hospital, liability would thus not be triggered by damage caused to his bodily integrity, for which the causal link is established with a probability of only 25%. Liability would be triggered, on the contrary, by the fact that the boy has lost the chance to recover.

This perspective is fundamentally different from the traditional point of view as it does away with the problem of causation. In our first case, there is no doubt that the lawyer’s negligence has deprived the Spanish secretary of a chance to win her case; neither is there any doubt that the English boy has lost a 25% chance of complete recovery due to the doctor’s malpractice.

The concept of ‘loss of a chance’ thus changes the object of legal protection: the direct object of protection in this loss of chance case is not the boy’s health but his chance to recover. The loss of chance theory also changes the elements to be taken into consideration in order to establish causation. Due to the change of perspective, the issue of causation is different and is no longer a problem.

Contrary to the traditional approaches, the loss of chance theory does not lead to compensation according to the principle of ‘all or nothing’. Due to the change of perspective, it leads to partial compensation of the damage corresponding to the chance lost. The French Cour de cassation has put it in the following words: ‘La réparation d’une perte de chance doit être mesurée à la chance perdue et ne peut être égale à l’avantage qu’aurait procuré cette chance si elle s’était réalisée’.

In the case of the English boy who lost a 25% chance to recover entirely, the negligent doctor would be liable for 25% of the boy’s damages. In the case of the young woman from Geneva who, due to an accident caused by the driver of a car, was prevented from participating in the Miss Suisse competition, her damage would probably be evaluated at 1/20 of the lost income she would have made had she won (supposing that there were twenty finalists).

In the other cases, the damages suffered would also be calculated according to the percentage of the chance lost.

6. Comparative Overview and Current Trends in European Private Law

Under the traditional approaches as they are currently employed in Europe, none of the victims in the above cases would succeed. According to the loss of chance theory, on the other hand, many if not all of the actions would succeed and lead to

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42 Cour de cass. 1er ch. civ. 9 Apr. 2002, Bull. civ. 1, no. 116; see also Le Tourneau, Droit de la responsabilité et des contrats, no. 1419, with further references.

43 For the situation in the US, see, for example, the brief overview by Weir, ‘Loss of a Chance - Compensable in Tort?’, in Neuere Entwicklungen, ed. Guillod, 111, at 123; Thevenoz, in Quelques questions fondamentales, eds Chappuis et al., 237, at 246 et seq.

44 See, for the fourth approach (i.e., the concept of alternative causation), however, infra IX.
compensation corresponding to the degree of the chance lost. The outcome of a
given case therefore depends very much on the concept applied.

The following comparative overview will show the current trends towards the
loss of a chance theory. The overview will reveal that the payment of damages for the
loss of a chance is far from being marginal in Europe today.

(1) In at least 12 European legal orders, the concept of loss of a chance is still
either unknown or has been rejected.\textsuperscript{45} Germany, Austria,\textsuperscript{46} Switzerland and Greece
all belong to this category. Other countries that have not (or not yet) adopted the
loss of chance approach are Hungary,\textsuperscript{47} the Czech Republic, Slovenia, Estonia, Denmark,
Sweden, Norway and Finland.

(2) In other European jurisdictions, the loss of chance approach is well estab-
lished and applies in many different factual situations. First and foremost in this
group is France, probably the first country to apply this concept at the end of the
nineteenth century. France will probably also be the first country to introduce the
concept of loss of a chance as a separate category of damages in its civil code.\textsuperscript{48}

Another example is the Netherlands, where partial compensation in cases of
uncertain causation has been awarded in cases involving the liability of lawyers as
well as in cases of medical malpractice.\textsuperscript{49}

(3) In a third group of legal orders, the concept of loss of a chance has been adopted
with slight modifications, or adopted only for certain categories of cases and not (yet)
for others. In Spain, the courts have applied the loss of chance theory.\textsuperscript{50} However, the
Spanish courts have evaluated the damage very liberally and with great flexibility and
do not necessarily link damages awarded to a precise calculation of the percentage of

\textsuperscript{45} See for the laws of these countries, the references and comments in \textit{Digest of European Tort Law}, eds
Winiger et al., 10.2. to 10.26; see also Helmut Koziol, ‘Comparative Report’, in \textit{Digest of European
Tort Law}, eds Winiger et al., 10.29.1 et seq and the case notes by Bien (Germany) and Koch (Austria)
in this volume.

\textsuperscript{46} See, however, for the law of Austria, the decision of the Fourth senate of the OGH cited \textit{supra} IV. 4.

\textsuperscript{47} See, however, the recent case: EBH 2005 no. 1220, BH 2005, no. 360 (Supreme Court, Legf. Bir.
Prv. III 20.028/2006): liability of medical doctors for professional negligence in the height of
30%, corresponding to the probability that their fault had caused the damage; according to Attila
Menyhárd, in \textit{European Tort Law 2006}, eds H. Koziol & B. Steininger, 276 et seq.; see also the case
note by Menyhárd in this volume.

\textsuperscript{48} See \textit{supra} I. Introduction, 2 and the case note by Borchetti in this volume.

\textsuperscript{49} W.H. Van Boom & I. Giesen, in \textit{Digest of European Tort Law}, eds Winiger et al., 10.8.4 et seq. and
10.8.9 et seq., with references.

\textsuperscript{50} J. Ribot & A. Ruda, in \textit{Digest of European Tort Law}, eds Winiger et al., 10.10.7 et seq.; Solé Feliu,
Case note on Spanish law, in this volume.
a chance lost. They have thus avoided establishing precise figures of probability and have awarded damage payments for the victims’ non-material harm instead.\footnote{Tribunal Supremo 10 Oct. 1998, RJ (1998): 8371; excerpts in \textit{Digest of European Tort Law}, eds Winiger et al., 10.10.1, and TS 9.7.2004; ibid., 10.10.5, with comments by J. RIBOT & A. RUDA; ibid., 10.10.8.; see also SOLE FELIU, in this volume.}

The courts in Italy have also adopted the loss of chance theory.\footnote{M. GRAZIADEI & D. MIGLIASSO, in \textit{Digest of European Tort Law}, eds Winiger et al., 10.9.5: ‘In Italy “loss of a chance” (\textit{perdita di chance}) has been an established category of recovery in tort since the 1980s’.} In one case, a candidate was excluded from an admission test without justification. Sixty-seven of the ninety-seven candidates succeeded in the test. The courts awarded damages for the loss of a chance on the basis that the chance of success was in excess of 50\%.\footnote{\textit{Corte di Cassazione} 19 Dec. 1985, Foro it. 1986, I, 383, excerpts in \textit{Digest of European Tort Law}, eds Winiger et al., 10.9.1.} In the field of medical malpractice, the Italian courts have applied the loss of chance theory also to cases with degrees of probability lower than 50\%.\footnote{\textit{Corte di Cassazione} 4 Mar. 2004, with comments by M. GRAZIADEI & D. MIGLIASSO, in \textit{Digest of European Tort Law}, eds Winiger et al., 10.9.7 and 10.9.9.}

The English courts apply the loss of chance theory to several categories of cases but refuse to apply it to medical malpractice. In the case of the English teenager whose injuries were falsely diagnosed, the boy had lost a 25\% chance of complete recovery. The House of Lords strictly applied the ‘more probable than not’ test to causation.\footnote{\textit{Hotson v. East Berkshire Area Health Authority} [1989] AC 750 (HL); excerpts in \textit{Digest of European Tort Law}, eds Winiger et al., 10.12.1, with comments by K. OLIPHANT; see also the case note on English law by K. OLIPHANT in this volume.} The boy could not satisfy the test since his chance of recovery was below 51\%. This precedent, the 1989 \textit{Hotson v. East Berkshire Area Health Authority} case, was confirmed in 2005 by the House of Lords in \textit{Gregg v. Scott}.\footnote{\textit{Gregg v. Scott} [2005] UKHL 2 (Lord Nicholls and Lord Hope dissenting); case notes by J. MORGAN, LMCLQ (2005): 281; E. PEEL, LQR 121 (2005): 364; G. REID, 21 (2005): 78; J.R. SPENCER, ‘Case Comment: Damages for Lost Chances: Lost for Good?’, \textit{Cambridge Law Journal} (2005): 282; J. STAPLETON, MLR 68 (2005): 996; A. MULLIS & D. NOLAN, \textit{All ER Annual Review} (2005): 479; MÄSCH, ZEuP (2006): 656.} In this case, a doctor had not diagnosed a cancer, thereby reducing the patient’s chance of survival from 42\% to 25\%. The patient’s claim for damages to compensate for negligence leading to a reduction in his chance of survival was dismissed by a majority in the House of Lords. However, as opposed to the situation in \textit{Hotson}, in \textit{Gregg v. Scott}, when the case came to be decided by the House of Lords, the negligent treatment had not yet led to any adverse outcome, such an outcome (i.e., a loss of life expectancy) remaining purely speculative. Given the time that had lapsed between the negligent treatment and the House of Lord’s decisions, it is possible to wonder
whether the claimant had actually lost any chance of long term survival at all.\textsuperscript{57} It is also worth noting that Gregg v. Scott was only decided with a 3:2 majority and that Lord Phillips, who supported the majority opinion, purposefully did not specify whether his position would be different for a case "[w]here medical treatment has resulted in an adverse outcome and negligence has increased the chance of this outcome".\textsuperscript{58}

In other categories of cases, the concept of the loss of a chance is well established in English law.\textsuperscript{59} If a lawyer negligently fails to bring a claim or to launch an appeal, according to the 1958 case Kitchen v. Royal Air Force Association,\textsuperscript{60} he will be held responsible for an amount corresponding to the probability of the lost chance (in Kitchen the client received 2/3 of the amount he could have gained had the first proceedings been won).

In the famous case Chaplin v. Hicks of 1911, the Court of Appeal awarded damages to a candidate who had not been duly notified of her interview and eventually had been excluded from a beauty contest although she had qualified for the competition.\textsuperscript{61} It was impossible for her to prove that she would have succeeded in the contest. All she could show was the loss of the chance to succeed, so that the case represents one of the early examples of the application of the loss of chance approach. In several other situations the Court of Appeal and the House of Lords have awarded damages for lost chances.\textsuperscript{62}

Scottish law - like English law - distinguishes between different categories of cases.\textsuperscript{63} In the field of medical malpractice, the courts refuse to award damages for

\textsuperscript{57} See Lord Phillips in Gregg v. Scott [2005] UKHL 2 at 131-133, 169; Baroness Hale, ibid., 226; see also Ken Oliphant, in European Tort Law 2005, eds H. Kosiol & B. Steininger (Vienna/New York: Springer, 2006), 228 et seq., in particular, no. 12 et seq.; see also Reid PN 21 (2005): 78 (91).

\textsuperscript{58} Gregg v. Scott [2005] UKHL 2, 190 and 188: 'I can envisage the application of this approach [i.e., that a claimant should recover damages for the reduction in his prospects of a cure] once the adverse outcome, which the exercise of due care might have averted, has occurred'; see also Mullis & Nolan, All ER Ann Rev 2005 (2005): 479 (481): 'a remark which might indicate that Gregg has not altogether shut the door on claims for loss of a chance'; Reid, PN 21 (2005): 78 (86): 'In these circumstances, it is perhaps arguable that the Lost Chance Argument is not yet lost to English law'; see also Oliphant in this volume, 3.2 in fine.

\textsuperscript{59} See, for example, the references in Gregg v. Scott [2005] UKHL 2 at n° 15 et seq.; Oliphant in this volume 4.; Mâché, ZEuP (2006): 662 et seq.; ibid., Chance und Schaden, 186 et seq; Ch. Müller, La perte d'une chance, 134 et seq.; Jansen, OJSt (1999): 271, 275 et seq., 288 et seq.


\textsuperscript{61} Chaplin v. Hicks [1911] 2 KB 786 (CA). Twelve out of fifty candidates were to be employed by a theatre for a period of three years. The chance of being among them was therefore about 25%.


\textsuperscript{63} In legal doctrine, this distinction has been criticised; see Martin Hogg, in Digest of European Tort Law, eds Winiger et al, 10.13.11, with references.
the loss of a chance. In cases of negligence on the part of lawyers, the principle of compensation for lost chances is, on the contrary, well established, and the action can succeed without the client having to prove that he would have won the case had the lawyer not been negligent.

In Portugal, a lawyer was condemned to compensate one quarter of his client's damage for having deprived him of a 25% chance of winning a case.

In 2004 the Irish High Court announced in an obiter dictum that the court was also in favour of the loss of chance theory.

(4) Similar to French law, in Belgian law, the concept of loss of a chance is frequently applied by the courts in cases of negligence by lawyers, in medical malpractice cases and in numerous other situations.

In 2004, a decision of the Belgian Cour de cassation has questioned the concept of loss of a chance in Belgian law: A young woman had received serious threats from her ex-boyfriend. The local police were informed about the threats and about the dangerousness of the man but did not take any safety measures to protect the woman. The man finally attacked her with acid, and she was seriously injured. The victim and her parents sued the City of Liège and the Belgian State for damages for negligent omissions.

The Court of Appeal of Brussels awarded damages to the woman. The court stated that it would have been impossible to afford her 100% protection from such an attack. The local police's failure to act had, however, deprived the woman of an 80% chance of avoiding the attack. The loss of this chance would justify an award of compensation amounting to 80% of the damage suffered.

The Cour de cassation quashed the decision of the Court of Appeal, stating that a causal link between the negligent conduct and the woman's injury needs to be proven with certainty to support a claim for damages. Any uncertainty remaining in relation to causation must lead to the claim failing. The case was referred to the

64 Kenyon v. Bell, 1953 SC 125, excerpts in Digest of European Tort Law, eds Winiger et al., 10.13.1, and M. Hogg, 10.13.3 et seq.
65 Kyle v. P & J Stormonth Darling, 1993 SC 57, excerpts in Digest of European Tort Law, eds Winiger et al., 10.13.7, with comments by M. Hogg, 10.13.10 et seq.
66 Lisbon Court of Appeal 8 Jul. 1999, according to Digest of European Tort Law, eds Winiger et al., 10.11.1, with comments by A. Perreira.
68 See, for example, Cour de cassation/Hof van Cassatie 19 Jan. 1984, Pas. 1984, I, 548 (medical malpractice, 80% of the damage awarded), excerpts in Digest of European Tort Law, eds Winiger et al., 10.7.1, with comments by I. Durant.
69 Cour de cassation/Hof van Cassatie 1 Apr. 2004, excerpts in Digest of European Tort Law, eds Winiger et al., 10.7.6 with comments by I. Durant, 10.7.11; A. Hirsch, in Les causes du dommage, eds
Court of Appeal of Mons for a final decision. The Court of Appeal came to the conclusion that the causal link between the negligent omission on the part of the police and the public prosecutor and the victim’s attack was established with certainty and eventually awarded full compensation to the victim.\textsuperscript{70}

The Cour de cassation’s decision of 2004 has been widely criticized in Belgian doctrine, and several courts of appeal in Belgium have continued to apply the loss of chance theory.\textsuperscript{71} Most interestingly, in June 2008, the Cour de cassation confirmed its case law of the period preceding the 2004 decision, holding that compensation for loss of a chance is due under Belgian law: In the 2008 case, a horse had died following the negligent treatment by a veterinary. Had the horse been treated properly, it would have had an 80% chance to survive. The Court of Appeal of Antwerpen awarded the owner of the horse 80% of his damage. The Cour de cassation confirmed this decision, expressly and unequivocally holding that the loss of a chance for the horse to recover or to survive \textit{(het verlies van een reële genezings- of overlevingskans)} is in itself a compensable damage.\textsuperscript{72}

(5) This overview shows, on the one hand, that in many countries the idea of compensating for lost chances either has not yet been accepted or has been rejected by the courts. On the other hand, in numerous other countries, the loss of chance theory has been widely accepted or has been accepted for many categories of cases. This is clearly true not only for France and Belgium but also for England, Spain, Italy and the Netherlands. It is also worth noting that the courts in Europe use the loss of chance theory in similar situations; however, whereas English and Scottish courts are, in applying the concept of loss of a chance, more severe with lawyers than with doctors, German and Swiss courts are, in applying a traditional approach, more severe with doctors than with lawyers.


\textsuperscript{71} See I. Durant, HAVE (2008): 72, 76 and n. 29) with cites to decisions of the Courts of Appeal of Liège, Anvers, Brussels, Gand, and Dinand.

\textsuperscript{72} Hof van Cassatie van België 5 Jun. 2008, Arrest Nr. C.07.0199.N n ° C.07.0199.N, in <www.juridat.be>:\textit{‘Het verlies van een reële genezings- of overlevingskans komt voor vergoeding in aanmerking indien tussen de fout en het verlies van deze kans een conditio sine qua non bestaat’} (The loss of a real chance to recover or survive can be a recoverable damage if natural causation between the fault and the loss of the chance is established).
7. The Position of the Law of the European Union and of the Principles of Law

7.1 The Law of the European Union

In the case law of the European Union courts, some decisions adopt the loss of chance theory, whereas the concept is rejected in others.

In 1993, in the case Moritz v. Commission, the European Court of First Instance had to decide a case in which a candidate’s application for a promotion to a superior position had been treated with negligence and his chances of being chosen were thereby reduced. The candidate brought a claim for damages. The claimant could not prove with certainty that, but for the negligence, he would have been appointed. The only damage he could invoke was the loss of the chance to be promoted to the position. The European Court of First Instance partially compensated the candidate for the loss of the chance to be promoted to a higher position.

In other situations, however, EU courts rejected partial compensation for lost chances. This is particularly true in the field of ‘distribution decisions’, that is, cases relating to EC funding operations. Here the EU courts require full proof that the applicant would have obtained the requested funds if the correct procedure had been followed.

7.2 Principles of European Contract Law, Draft Common Frame of Reference, UNIDROIT Principles of International Commercial Contracts and PETL

The Principles of European Contract Law (PECL or Lando Principles) do not explicitly mention loss of chance in their rules on damages (Articles 9:501-9:510). According to the commentary to 9:501 (2) (b) PECL, that is, the Principles’ provision on future losses, ‘[f]uture loss often takes the form of the loss of a chance’. The Principles of European Contract Law thereby limit the issue of lost chances to uncertainty about future events. Article III-3:701 (2) of the Academic Draft Common Frame of Reference follows this example.

74 See the comments on this case by U. Magnus & K. Bitterich, in Digest of European Tort Law, eds Winiger et al., 10.27.1.
77 Art. 9:501: Right to Damages, (2) provides: ‘The loss for which damages are recoverable includes: ... (b) future loss which is reasonably likely to occur’.
78 Comment F.
The 2004 Principles of International Commercial Contracts (UNIDROIT Principles) take a broader view on the issue of lost chances: Article 7.4.3 section 2 of the UNIDROIT Principles states that '[c]ompensation may be due for the loss of a chance in proportion to the probability of its occurrence'. The official commentary to the Principles gives the example of 'the owner of a horse which arrives too late to run in a race as a result of delay in transport.' He 'cannot recover the whole of the prize money, even though the horse was the favourite' but has a right to partial compensation 'in proportion to the probability' of winning the race.

The official commentary gives the further example that 'A entrusts a file to B, an express delivery company, in response to an invitation to submit tenders for the construction of an airport. B undertakes to deliver the file before the closing date for tenders but delivers it after that date and A's application is refused. The amount of compensation will depend upon the degree of probability of A's tender having been accepted and calls for a comparison of it with the applications which were admitted for consideration. The compensation will therefore be calculated as a proportion of the profit which A might have made.' The UNIDROIT Principles thus clearly adopt the position that a claim for damages may be based on the loss of a chance. Inspired by Article 7.4.3 section 2 of the UNIDROIT Principles, arbitration courts have awarded damages for the loss of a chance in contract cases on several occasions.

The PETL, published in 2005 by the European Group on Tort Law, do not mention the term loss of chance. However, their application would lead to partial compensation in many loss of chance cases. The approach adopted in the Tort Law Principles will be analyzed later.

Text with comments in <www.unilex.info/>.

UNIDROIT Principles, Art. 7.4.3, Commentary 1, in <www.unilex.info/>.

UNIDROIT Principles, Art. 7.4.3, Commentary 2, Illustration, in <www.unilex.info/>.

Most claims were brought for lost profit which, according to the traditional rules, could not be proved with sufficient probability: Ad hoc arbitration (San José, Costa Rica), Arbitral Award 30.04.2001, Source: V. PÉREZ VARGAS & D. PÉREZ UMANA, 'The UNIDROIT Principles of International Commercial Contracts in Costa Rican Arbitral Practice', Uniform Law Review (2006): 181 (Claim for damages for lost profit; the Arbitral Tribunal held that the expected gains were too uncertain to be compensable in their entirety and therefore awarded damages only for the loss of a chance, referring expressly to Art. 7.4.3 of the UNIDROIT Principles); see also ICC International Court of Arbitration, Paris, Arbitral Award 8264, 04.1997, ICC International Court of Arbitration Bulletin, vol. 10, No. 2, case 1999, 62–65 (sale of industrial appliances and of know-how, non-delivery of know-how, loss of the possibility to adapt industrial appliances to changing needs of the market; damages for loss of a chance awarded, inspired by Art. 7.4.3 of the UNIDROIT Principles); see also (but without express reference to the UNIDROIT-Principles) ICC International Court of Arbitration, Arbitral Award No. 9078, 10.2001, Excerpts in ICC International Court of Arbitration Bulletin, 2005 Special Supplement, 73–76 (violation of a ban on distribution and of restrictions on trade, lost profit, decision inspired, among others, by the UNIDROIT Principles).

Infra IX. 2.
8. The Arguments in Favour of and against the Compensation of Lost Chances

8.1 The Arguments against Liability for ‘Lost Chances’

There are several arguments against the payment of damages for lost chances.

In a 2005 decision concerning liability for medical malpractice, the English House of Lords stated that if a patient proved with a probability of 75% that the doctor’s carelessness caused him damage, his damage payments should not be reduced from 100%. On the other hand, if it is more likely than not that the doctor’s carelessness did not contribute to the damage, ‘then the defendant does not want to have to pay damage for the 20% or 30% chance that it did’. The House of Lords came to the conclusion that ‘[a] more likely than not approach to causation suits both sides’. In other words, it could be said that the ‘all or nothing’ approach is entirely adequate and corresponds to the expectations of both the victim and the person held responsible.

Another argument can be found in the fact that the principal aim of the liability regime in private law is compensation, not the punishment of generating risks. One may further ask if it is not part of the victim’s ordinary risks of life that in some situations he or she cannot prove a causal link with a degree of probability required by law.

If compensation for lost chances were to be admitted, would it not be the case that most cases would need to be analyzed a second time in relation to lost chances? In the words of the English House of Lords in a decision concerning liability for medical malpractice, ‘almost any claim for loss of an outcome could be reformulated as a claim for loss of a chance of that outcome’. Would partial compensation therefore become the rule and full compensation the exception?

According to yet another argument, the loss of chance theory would generate additional costs, given that cases rejected today as failing to meet the standards set by the law would result in partial compensation under the loss of chance approach. What is more, the loss of chance approach could generate additional transaction costs. It is argued that it would often be difficult, time consuming and expensive to determine probabilities with a degree of certainty sufficient to adequately distribute the damages between the parties. It seems that this is why the Spanish courts have, in some cases, opted to compensate not for economic loss but for the mental harm suffered by the victim due to the lost chance.

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86 Baroness Hale in Gregg v. Scott UKHL (2005): 2, 195; and 223.
89 See on this argument, Fleischer, JZ (1999): 766, 769.
90 Supra VI. 3.
It may often be very difficult, even for scientific experts, to make an accurate assessment of the probability that a certain activity may have caused a certain damage. The ‘all or nothing’ approach has the advantage of being simple. Under the ‘all or nothing’ principle, there is no need to establish precise degrees of probability. If the causation is probable to the degree of preponderance, the damage will be fully compensated. Below this limit, no compensation is awarded. One could further argue that the German and Swiss experiences show that it is possible to solve the most pressing problems of uncertain causation in cases involving the liability of lawyers and medical malpractice by using traditional remedies. 91

All these arguments plead in favour of more traditional solutions or show that the loss of chance approach should be treated with caution.

8.2 Arguments in Favour of Partial Compensation in Cases of Uncertain Causation

There are, however, many other arguments which favour partial compensation in cases of uncertain causation.

Liability for only a certain percentage of the damage is familiar to all European legal orders in cases of contributory negligence on the part of the victim. Partial liability as such would therefore not be totally new.

It is true that making precise assessments of the probability that a certain activity may have caused certain damage may often be difficult; however, assessments on probabilities must also be made for all other approaches to solving the problem of causal uncertainty. 92

In cases in which it is difficult to establish causation, the parties often reach settlements on the amount of damages. Even in the national legal systems that have not (or not yet) adopted the loss of chance approach, in many cases the victim receives partial compensation for the damage suffered. In such cases, the parties often consider partial compensation more equitable than an ‘all or nothing’ approach to compensation.

In some cases in which no compensation is awarded today, the application of the loss of chance approach would lead to partial compensation. In other cases, in which the damage is totally compensated today, the loss of chance approach would lead to only partial compensation. The costs resulting from the different approaches

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91 See supra IV. 1-3. In all other cases, for example in the absence of gross negligence of a doctor, or in the situations belonging to the third and fourth categories of cases (supra II. 3. and 4.), the claim would fail given the fact that causation cannot be proved with the required degree of certainty. See, for the case of the architect who was excluded from an architectural contest in an unjustified manner, BGH, NJW (1983): 442, 444: ‘Dem Kläger steht jedoch der Nachweis offen, dass er bei Zulassung zum Architekturwettbewerb einen der ausgesetzten Preise gewonnen hätte’.

are not necessarily very different. What changes is the adjustment of the compensation in each specific case.

Experience in France, Belgium, the Netherlands and other countries show that the concept of loss of a chance can be useful if handled with care.\(^{93}\) One of the characteristics of English tort law is the search for limits on liability. The argument that the floodgates must be kept shut has an important value before English courts.\(^{94}\) Bearing this in mind, it is most remarkable that the English courts have largely adopted, for many categories of cases, the loss of chance approach. That it has not been accepted for medical malpractice cases is an exception in English law that is hardly consistent with the precedents established in other fields by the English courts.\(^{95}\)

The traditional approaches have important limits. We have seen that in German law, in cases of gross negligence by a doctor, the burden of proof is reversed.\(^{96}\) However, the patient does not necessarily want to see the doctor punished for his imprudent acts. He wants to be compensated for damages regardless of the doctor’s degree of fault.\(^{97}\) In fact, there is no link between the degree of the doctor’s fault and the probability that the fault caused damage to the patient. The decisions of German courts clearly show that this link is missing: In one case, there was a 90% chance that a minor fault on the doctor’s behalf led to a patient’s damage. The court however refused to award compensation because of the remaining doubt in relation to causation. In another case, there was a 10% chance that gross negligence led to the patient’s problems.\(^{98}\) Given that this was a case of gross negligence, the damage was fully compensated for. The results in these cases are inconsistent with one another and the solutions are unsatisfactory.\(^{99}\)

\(^{93}\) Fleischer, JZ (1999): 769 et seq.
\(^{94}\) For the floodgates argument in cases of medical negligence, see Peel, LQR 121 (2005): 364 et seq.
\(^{95}\) See the dissenting opinion by Lord Nicholls in Gregg v. Scott UKHL (2005): 2, 25: “The law would rightly be open to reproach were it to provide a remedy if what is lost by a professional adviser’s negligence is a financial opportunity or chance but refuse a remedy where what is lost by a doctor’s negligence is the chance of health or even life itself. Justice requires that in the latter case as much as the former the loss of a chance should constitute actionable damage”; see also Reid, PN 21 (2005): 78, 91: ‘Much needs to be done in this area to put the law on a coherent footing’; Stapleton, MLR 68 (2005): 996, 1003 et seq. and 1006: ‘Judges and commentators are divided about the appropriateness of the law appearing to rank the market value of a person’s labour higher than his or her interest in physical security’; Morgan, LMCLO (2005): 281 et seq.; Peel, LQR 121 (2005): 364, 368-369; Mäch, Zeup (2006): 656, 665 et seq.; for an attempt to distinguish the categories of cases, see Reece, MLR 59 (1996): 188 et seq.
\(^{96}\) Supra IV.3.
\(^{99}\) See also Mäch, Chance und Schaden, 35 et seq.; Bien in this volume, 8.
The issue of loss of a chance is raised in situations in which the negligence of one person destroys the chance of an outcome favourable to another. Uncertainties that are due to the first person’s negligence should be part of his or her ordinary risks of life instead of being borne by the party that has lost the chance of a more favourable outcome. The High Court of Zurich stated, in a 1989 ruling: ‘To refuse damage payments to the relatives of a patient who had clearly been treated wrongfully and who subsequently had died of cancer with the argument that the causal link between the fault committed by a doctor and the patient’s death remains uncertain would be highly unjust’.100

The criticism of the ‘all or nothing’ principle is particularly heavy in cases where the probability reaches the limits of the level required.101 It has often been criticized as unjustifiable that in cases where there is a probability of causation of 50%, an action is entirely rejected, whereas in cases where there is a probability of 51% the victim receives full compensation. Donaldson, the English Master of the Rolls and judge in the Court of Appeal, expressed the opinion that ‘[i]f this is the law, it is high time that it was changed’.102 In his dissenting opinion in the medical malpractice case of Gregg v. Scott, Lord Nicholls stated that ‘[t]his surely cannot be the state of the law today. It would be irrational and indefensible. The loss of a 45% prospect of recovery is just as much a real loss for a patient as the loss of a 55% prospect of recovery. ... It cannot be right to adopt a procedure having the effect that, in law, a patient’s prospects of recovery are treated as non-existent whenever they exist but fall short of 50%’.103 Many practitioners on the Continent confirm that in many cases clients consider the ‘all or nothing’ approach as highly unjust and difficult to accept for victims.

The loss of chance approach avoids the use of fictions by judges to determine causation in order to reach just results in specific cases. It avoids the courts ‘tak[ing] for granted what in fact is uncertain’.104 The Belgian case of the young woman who

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101 See, for example, Bydlnski, FS Beitze, 3, 32 et seq.; Stoll, FS Steffen, 465, 466; Jansen, OJLS 19: 271, 277 et seq.; Koziol, FS Stoll, 233, 238; Ch. Müller, La perte d’une chance, n. 272 et seq., 290; Misch, Chance und Schaden, 125 et seq.; A. Hirsch, in Les causes du dommage, eds Chappuis & Winiger, 288: ‘la théorie absolue de la causalité, du “tout ou rien”, est dépassé’; KADNER GRAZIANO, in Digest of European Tort Law, eds Winiger et al., 10.28.18 et seq.


103 Gregg v. Scott, UKHL (2005): 2, 3 and 43. See also p. 46: ‘The present state of the law is crude to an extent bordering on arbitrariness’. See also Lord Hope, ibid., 114 et seq. (diss. op.).

104 Koziol, in Digest of European Tort Law, eds Winiger et al., 10.29.4; LORD NICHOLLS in Gregg v. Scott, UKHL (2005): 2, at 43: ‘The law should not, by adopting the all-or-nothing balance of probabilities approach, assume certainty where none in truth exists’.

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had been attacked by her ex-boyfriend\textsuperscript{105} illustrates this point. As long as the courts were free to compensate the victim according to the probability of causation, they estimated this probability (in the Belgian case: a probability of 80\%). Once the \textit{Cour de cassation} had decided that the courts had to apply an ‘all or nothing’ approach in this case, uncertainty turned into certainty, and the lower courts held the defendant liable for 100\% of the damage.

Generally, partial compensation in cases of uncertain causation is considered as better achieving the aim of compensating victims as opposed to the ‘all or nothing’ and other traditional approaches. The following example may illustrate this: Due to (gross) medical malpractice, a doctor does not correctly diagnose an injury or disease in a significant number of patients. As in the case of the English boy, each patient loses a 25\% chance of a positive outcome. Several patients suffer from complications. Under the ‘more probable than not’ and the ‘all or nothing’ principles, no patient would receive damage payments, as none of them would meet the requirements of the test; the doctor would escape liability in all cases despite the fact that, statistically, he did cause damage in some of the cases. Under the approach that shifts the burden of proof in cases of gross negligence, the doctor would be fully liable in all cases although he would almost certainly have caused damage in only some of the cases.\textsuperscript{106} Under the concept that provides for damage payments according to the probability of causation, on the contrary, each patient would receive payments corresponding to the probability that the risk has realized. It is only under this approach that liability and damage payments correspond to the damage that has, in fact, been negligently caused.

Prevention of damage is another objective of liability which has been increasingly accepted in European private law and which has been adopted as one of the guiding principles of liability law in the PETL.\textsuperscript{107} The objective of preventing damage from happening rather than punishing the tortfeasor also supports the apportioning of partial compensation in cases of uncertain causation.\textsuperscript{108} Under the ‘all or nothing’ approach, numerous violations of contractual and extra-contractual obligations remain without consequence although they might have caused enormous damage. From an economic perspective, this is inefficient; moreover, it appears unfair.\textsuperscript{109} Partial liability would, on the other hand, create an incentive for the parties to behave as required under the contract or by law and hold the defendant liable

\textsuperscript{105} Supra VI. 4.
\textsuperscript{106} See also FAURE & BRUGGEMAN, in \textit{Causation in Law}, ed. Tichy, 105 et seq.
\textsuperscript{107} Art. 10:101 second sent. of the Principles states: ‘Damages also serve the aim of preventing harm’.
\textsuperscript{109} FAURE & BRUGGEMAN, in \textit{Causation in Law}, ed. Tichy, 105 et seq.; see also the dissent by LORD NICHOLLS in \textit{Gregg v. Scott}, UKHL (2005): 2, 4: ‘It would mean that in the 45\% case the doctor’s duty would be hollow’.
to an extent that corresponds to the risk and most probably to the damage he or she has caused.\textsuperscript{110}

9. Proposal

There are several arguments against compensating for lost chances; others speak in favour of partial compensation in cases of uncertain causation. How can the problem be solved?

In many cases of the first category (i.e., in cases of lawyers’ professional liability\textsuperscript{111}), it will be possible to initiate ‘proceedings within proceedings’ allowing for an \textit{ex post} remedy of the problem of uncertainty.\textsuperscript{112} This seems to be the best solution for this category of cases. In the other categories of cases, a distinction could be drawn between contractual liability and liability in tort.

9.1 Contractual Liability

In the field of contractual liability, preserving the chance of a successful outcome may be at the heart of the contractual obligations:\textsuperscript{113} If a doctor fails to carry out an act that is prescribed by professional standards, he violates a principal obligation of his contract with the patient, which is to do everything that is necessary in the patient’s interest; if a lawyer fails to take a step that is required in the interests of his client, he violates a principal duty of the contract with the client, that is, to do anything that is necessary for the client to succeed with his case. The doctor’s or the lawyer’s principal obligations are, in most cases, obviously not to guarantee a favourable outcome but to do everything necessary to preserve the patient’s chances of recovery or the client’s chances to succeed in his or her case.

This is so not only when a patient concludes a contract with the doctor and his chance of a favourable outcome exceeds 50%, but also when his chance is less than 50%; the same is true, for example, in cases involving the liability of lawyers. When concluding the contract, the patient or client acquires a \textit{chance of an outcome favourable to him}. Preserving this chance is at the very heart of the contract. It is usually the doctor’s or lawyer’s principal contractual obligation.

Denying that the patient or client suffers compensable damage if the chance of a favourable outcome is negligently lost by the other party ignores the fact that, when concluding the contract, both parties agreed on a price for preserving the


\textsuperscript{111} Supra II. 1.

\textsuperscript{112} Supra IV. 1. For a critical view of this solution, see Mäsch, ZEuP (2006): 656, 674; ibid., \textit{Chance und Schaden}, 142 et seq., 388 et seq., 400 et seq.

\textsuperscript{113} This is true both for the contract between patient and doctor and for the contract between client and lawyer. See also Mäsch, \textit{Chance und Schaden}, 237 et seq., conclusions, 423 et seq., particularly points 3, 6, 7 and 10; \textit{contra} Fleischer, JZ (1999): 766, 772.
chance. To argue that the patient or client does not suffer damage when the chance is negligently lost is thus in total opposition to the very content of the contract.\textsuperscript{114}

Once the violation of the obligation to preserve the chance is established, the issue is how to measure the resulting damage. In cases where there is a second chance to achieve an outcome favourable for the patient or client, the amount due should arguably correspond to the amount necessary to take advantage of this second chance. In all other cases, that is, where the chance is definitively lost, damages can only be measured by taking into account the negative consequences the victim suffers from the events. However, given the fact that the person held responsible (e.g., a doctor or lawyer) has contributed only one of the potential causes of the damage, he should only be liable to the extent corresponding to the likelihood that he may have caused the victim’s damage.

The patient’s or client’s chance of success could thus very well be taken into consideration even if the probability of a favourable outcome is below 100\%, 80\% or 51\%. The fact that the violation of a principal obligation under the contract would otherwise not be sanctioned and the aspect of prevention as one of the main purposes of the law on liability are important arguments in favour of partial compensation according to the degree of probability of the chance that was lost.\textsuperscript{115}

9.2 Liability in Torts

9.2.1 Starting Point

In the field of liability in torts, the issue is more delicate. In most, if not all, European legal orders in torts, the categories of actionable damage are limited. Comparative studies have confirmed that certain rights that lawyers trained in Germanic legal systems usually call \textit{absolute rights} enjoy a more extensive protection than others. In German law, it is, in principle, the violation of one of the victim’s absolute rights (i.e., the right to life, bodily integrity, health, freedom, property and similar rights enjoying protection \textit{erga omnes}) that triggers liability in tort. In Swiss law, an act is considered illegal and triggers liability if it violates an absolute right (Swiss lawyers

\textsuperscript{114} See also Lord Nicholls in Gregg v. Scott UKHL (2005): 2, 42: ‘[A] doctor’s duty to act in the best interest of his patient involves maximising the patient’s recovery prospects, and doing whether the patient’s prospects are good or not so good... A patient should have an appropriate remedy when he loses the very thing it was the doctor’s duty to protect. To this end the law should recognise the existence and loss of poor and indifferent prospects as well as those more favourable.’; Lord Hope, ibid., 116: ‘The Patient values his prospects of survival, even when he is told that they are less than fifty-fifty. It should make no difference whether his prospects are over fifty-fifty or less than that, so long as they were significant and not illusory’. See also Kadner Graziano, HAVE (2008): 61, 65.

\textsuperscript{115} See also Mäsch, \textit{Chance und Schaden}, 427 no. 18; ibid., ZEuP (2006): 656, 675.
speak of ‘Erfolgsunrecht’). In English law and, to some extent, even in French law, where the proposed reform confirms a hierarchy of rights protected in torts, we observe that these rights also enjoy a more extensive protection. This hierarchy of rights provides an efficient guarantee, in the German legal family, and also in England and most other European tort law systems, that the floodgates of liability are kept shut.

To say, without any major distinction between the rights concerned, that the loss of a chance (e.g., to recover from an injury or to win legal proceedings) is a compensable injury in tort risks undermining the limits of liability in tort. Given that many tort law systems respect a hierarchy of legally protected interests when it comes to tort liability, it would be highly problematic to treat the different categories of loss of chance cases in the same way. In medical malpractice, the interests at stake are bodily integrity and life. These interests enjoy the highest protection in the law of tort. On the other hand, in other categories of cases, the lost chances concern purely economical interests that enjoy a more limited protection in tort law.

9.2.2 Proposal for Solution

9.2.2.1 Condition of Liability: Violation of an Interest Protected under Tort Law

For liability in tort, the solution could be found in the continued respect of the traditional categories of actionable damage and in the respect of the hierarchy of protected interests, as suggested, for example, in the PETL. According to Article 2:102 of the Principles, which is the result of intensive comparative studies: ‘(1) The scope of protection of an interest depends on its nature; the higher its value, the precision


117 See also: Morgan, LMCLQ (2005): 281, 289: ‘the law tends to find liability for personal injury much more readily than for the infliction of economic loss’; Oliphant, in this volume, 4.


120 Stoll, FS Steffen (1995), 465, 472 et seq.; Koziol, in Digest of European Tort Law, eds Winiger et al., 10.29.5.

121 See, for example, W. Van Boom, H. Koziol & Ch. Witting, Pure Economic Loss (Vienna/New York: Springer, 2004); Koziol, in Digest of European Tort Law, eds Winiger et al., 10.29.5. The rule in Art. 1346 of the French avant-projet that states that ‘the loss of a chance is a compensable injury’ therefore may fit in French law, but it seems unlikely that it would be adequate for certain other countries or for European private law in general.
of its definition and its obviousness, the more extensive is its protection. (2) Life, bodily or mental integrity, human dignity and liberty enjoy the most extensive protection, whereas, according to section (4) '[p]rotection of pure economic interests or contractual relationships may be more limited in scope. In such cases, due regard must be had especially to the proximity between the actor and the endangered person, or to the fact that the actor is aware of the fact that he will cause damage even though his interests are necessarily valued lower than those of the victim'.

In the case of the English teenager, the interest affected would be the boy’s health and bodily integrity, that is, an interest enjoying the most intensive legal protection. In the case of the Spanish secretary, it would be her economic interests that are affected, and these only enjoy limited protection in tort law.

9.2.2.2 Partial Liability Corresponding to the Probability of Causation

Once an injury to an interest protected by tort law is established,\textsuperscript{122} the question becomes, yet again, one of causation between the defendant’s act and the victim’s damage: in the case of the English boy - between the doctor’s negligence and the boy’s permanent disability. In this case, there is a 75% probability that the problem was solely due to the fall from the tree, that is, an event that can only be attributed to the boy himself, whereas there is a 25% probability that the disability was due to the boy’s accident and the subsequent medical malpractice. In the first case, the boy’s accident alone would be the \textit{conditio sine qua non} of his injury; in the second case, both the boy’s accident as well as the following medical fault would be \textit{conditiones sine quibus non}.

In such a situation, the liability could be determined by applying rules on alternative causation. Just like the decision of the fourth senate of the Austrian

\textsuperscript{122} For cases in which such injury has not yet occurred, see, e.g., Lord Phillips, in \textit{Gregg v. Scott}, UKHL (2005): 2, 190: ‘Awarding damages for the reduction of the prospect of a cure, when the long term result of treatment is still uncertain [as it was in \textit{Gregg v. Scott} according to the majority opinion, note by the author], is not a satisfactory exercise. Where medical treatment has resulted in an adverse outcome and negligence has increased the chance of that outcome, there may be a case for permitting a recovery of damages that is proportionate to the increase of the chance of the adverse outcome.’ See also Lord Hope, ibid., 118 (dissenting opinion): ‘I would distinguish this case from those where a claim is made for compensation for a disease from which the claimant does not presently suffer and with which, perhaps more likely than not, he will not ever be afflicted. In cases of that kind the claim that there is an increased risk of contracting the disease may be regarded as a speculative claim for future harm’; Baroness Hale, ibid., 212: ‘Unless damages were limited to a modest sum for anxiety and distress about the future, sensible quantification would have to “wait and see”’. See also Morgan, LMCLQ (2005): 281, 285 et seq.; see, e.g., 288: ‘Lord Hoffmann himself made this point in \textit{Gregg}, noting that the definition of “injury” for the purpose of allowing recovery of losses consequent on it will be the key question in loss of a chance cases’; Stapleton, LQR 119 (2003): 388, 424 describes a ‘uniform hostility’ of English judges to claims for loss of a chance where there are no physical changes yet.
Supreme Court of Justice, Article 3:103 of the PETL (on ‘alternative causes’) provides in section (1) that:

[i]n case of multiple activities, where each of them alone would have been sufficient to cause the damage, but it remains uncertain which one in fact caused it, each activity is regarded as a cause to the extent corresponding to the likelihood that it may have caused the victim’s damage.\(^{124}\)

In addition, Article 3:103 of the Principles states that:

[t]he victim has to bear his loss to the extent corresponding to the likelihood that it may have been caused by an activity, occurrence or other circumstance within his own sphere.

Provided that the victim is injured in respect of an interest enjoying protection by the law of tort, the damage could then be divided between the victim and the person held to be liable, and the damage could be apportioned according to the probabilities of causation.\(^{125}\)

For practical reasons and in order to reduce administrative costs, probabilities that remain below a certain borderline should be entirely ignored in determining the shares of liability.\(^{126}\) In addition, purely hypothetical damage would have to be ignored. In this sense, the French Cour de cassation takes lost chances into consideration only if they are ‘réelle et sérieuse’;\(^{127}\) according to English case law, the lost chance must have been ‘a real or substantial chance as opposed to a speculative one’.\(^{128}\) On the other hand, where the probability reaches 90% or more, full compensation could be awarded.

Under this proposal, the loss of a chance would not be regarded as a (new) category of damage, contrary to the current French proposal for reform. Loss of chance cases would, on the contrary, be analyzed under the rules on alternative causation.

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\(^{123}\) Supra IV. 4.

\(^{124}\) See also Art. VI. 4:103 of the Draft Common Frame of Reference providing for a reversal of the burden of proof and liability in solidum in situations of ‘alternative causes’.

\(^{125}\) For the application of the Principles to cases of ‘lost chances’ and, in particular, the case of the English boy, see Th. Kändner Graziano, in Digest of European Tort Law, eds Winiger et al., 10.28.1-25.

\(^{126}\) Faure & Bruggeman, ‘Causal Uncertainty and Proportional Liability’, in Causation in Law, ed. Tichy (Praag: Univerzita Carlova, 2007), 105, 114; see on this issue, Digest of European Tort Law, eds Winiger et al., Ch. 9.

\(^{127}\) Cour de cass. (Ass. plén.) 3 Jun. 1988, La Gazette du Palais (Caz. Pal.) 1988, 2, pan. 180; see also Le Tourneau, Droit de la responsabilité et des contrats, no. 1418.

In certain situations, the concept of loss of a chance and the application of the rules on alternative causation pursue the same aims. They are, in these cases, to a certain degree and as for the results achieved by both approaches, equivalent.\textsuperscript{129} Compared with the concept of loss of a chance, the suggested solution would lead to an apportionment of damages corresponding to the probabilities of causation, just like the 'lost chances' approach, but would have the advantage of perfectly respecting the hierarchy of interests protected by the law of tort.

9.3 Solution of the Cases under the Proposal

How would the cases used as examples be solved under this proposal?

The Spanish secretary’s chances of winning her case before the labour court would be analyzed in the subsequent action for liability for breach of contract against the lawyer who omitted to bring the claim in time. The solution would thus be ‘proceedings within the proceedings’ and – in the ideal scenario – certainty about causation between the lawyer’s negligence and the secretary’s damage would be determined in the proceedings regarding the lawyer’s liability. If it were to prove impossible to establish, in a hypothetical manner, whether the lawyer’s negligence had caused the secretary’s loss, she could, at least on a contractual basis, claim damages for the loss of a chance of an amount corresponding to the probability of her winning the case.\textsuperscript{130}

The English teenager’s claim against his doctor would be successful for a percentage of the damage corresponding to the likelihood that the doctor’s negligence contributed to the damage, either on a contractual basis or in tort, given that the boy suffered damage to his health, that is, to an interest that enjoys the most extensive protection under tort law.\textsuperscript{131}

The candidate for the title of Miss Suisse 2006 could not proceed on a contractual basis, as there was no contract between her and the person responsible for the traffic accident in which she was hurt. Given that she was physically injured, a claim based on liability in tort would, in principle, be open to her. However, it seems doubtful that her claim would succeed. Given the fact that she remained free to

\textsuperscript{129} For this equivalence (‘Funktionsäquivalenz’), see, for example, FRANZ BYDLINSKI, Die Verursachung im Entwurf eines neuen Schadensersatzrechts, in Entwurf eines neuen österreichischen Schadensersatzrechts, eds I. Griss, G. Kathrein & H. Koziol (Wien/New York: Springer, 2006), 37, 42 et seq.; H. Koziol, in Digest of European Tort Law, eds Winiger et al., 10.29.2, 8; Jacques Boré, ‘L'indemnisation pour les chances perdues: une forme d'appréciation quantitative de la causalité d’un fait dommageable’, JCP G I (1974): 2620; MÄSCH, Chance and Schaden, 161; JANSEN, OJL St. (1999): 271, 283; KADNER GRAZIANO, in Digest of European Tort Law, eds Winiger et al., 10.28.3 et seq., 10.28.17.

\textsuperscript{130} For the solution of the case under the Principles of European Tort Law, see TH. KADNER GRAZIANO, in Digest of European Tort Law, eds Winiger et al., 10.28.20-25.

\textsuperscript{131} For the solution of this case under the Principles of European Tort Law, see TH. KADNER GRAZIANO, in Digest of European Tort Law, eds Winiger et al., 10.28.1-19.
participate in the next year’s contest, her chance was not definitively lost. She could, however, claim costs caused by the delay of her participation.

If the young woman from Leeds who lost a leg to cancer following a negligently delayed diagnosis\(^{132}\) did not succeed in establishing that she lost her leg as a result of her GP’s negligence, she would still succeed in her claim against her GP to a degree corresponding to the probability that she would not have lost her leg had she received a timely diagnosis.

10. Resume

(1) The courts in Europe use the loss of chance approach in similar situations. The common denominator in cases in which the approach has been used is that the person held to be liable has acted negligently, but the victim cannot show with the certainty that is usually required that the loss would have been prevented had the other party acted as required under the contract or by law.

(2) The loss of chance theory changes the object of legal protection. According to this approach, the act that triggers liability in cases of uncertain causation is not the violation of a right that is traditionally the object of protection in contract or in tort. The fact that triggers liability is the loss of a chance itself. Due to the change of perspective, the issue of causation is no longer a problem. The loss of chance approach does not lead to compensation according to the ‘all or nothing’ principle but rather to partial compensation of the damage corresponding to the chance lost.

(3) As far as compensation for lost chances is concerned, the situation in European private law is very diverse: In many countries the idea of compensating for lost chances has not yet been accepted or has been rejected by the courts. In numerous other countries, the concept of loss of a chance has been widely accepted or has been accepted for certain categories of cases.

(4) Taking into account the recent developments in European private law as far as compensation for lost chances is concerned, the solution for the future could be to partially abandon the ‘all or nothing’ principle and to compensate, under certain conditions, for damage according to the probability of causation.

(5) In the law of contract, preserving the chance of a successful outcome may be at the heart of the contractual obligations. Once the violation of this obligation is established, the problem is how to measure the resulting damage. In this context, the patient’s or client’s chance of success could very well be taken into consideration even if the probability of a favourable outcome is below the probability traditionally required by law.

\(^{132}\) Supra I. Introduction, 1.
(6) In the field of liability in tort, in order to respect the limits of tortious liability, the solution should respect the traditional hierarchy of protected interests just as is suggested by the PETL. Once an injury to an interest protected by the law of tort is established, the loss of a chance should not be regarded as a (new) category of damage but as an issue of causation.

(7) Rules on alternative causation (such as those suggested in the PETL) would allow lost chances to be partially compensated for and for damages to be apportioned according to the probabilities of causation. This approach has the advantage of perfectly respecting the hierarchy of interests protected by the law of tort and therefore respecting the limits of tortious liability whilst at the same time avoiding the severity of the ‘all or nothing’ approach.

(8) Given the fact that, in recent years, partial compensation in cases of uncertainty of causation has been awarded by state courts or in arbitration proceedings in several European countries, and given the fact that the UNIDROIT Principles and, with a different approach, also the PETL, suggest, under certain circumstances, compensating for damages in situations of lost chances, it seems that the issue of partial liability in cases of uncertain causation also merits further discussion in those countries like, for example, Germany or Switzerland, that still exclusively apply the ‘all or nothing’ approach or, like England or Scotland, that compensate for lost chances in some categories of cases but not in others.