Causation as an Element in Delict/Tort in Scots and Louisiana Law

Citation for published version:

Digital Object Identifier (DOI):
10.3366/edinburgh/9780748638864.003.0022

Link:
Link to publication record in Edinburgh Research Explorer

Document Version:
Peer reviewed version

Published In:
Mixed Jurisdictions Compared

Publisher Rights Statement:

General rights
Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy
The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.
CAUSATION AS AN ELEMENT OF DELICT/TORT IN SCOTS AND LOUISIANA LAW

Martin A Hogg*

A. INTRODUCTION

At first glance, causation may not seem an obvious subject of enquiry for a comparative work on Scots and Louisiana private law. There is a tendency to assume that every jurisdiction takes the same approach to causation, and that inconsequence there is little point to comparative causal analysis. As will be seen in this chapter, while this assumption may be true of the basic principles of causation, specific jurisdictional developments in Scotland and Louisiana have led to the adoption of different analyses in respect of certain causal problems, even if the result turns out to be the same in some of the problems. Causation may also seem an unusual topic for examination in that, unlike the other subjects covered in this volume, the Louisiana Civil Code contains no provision relating to causation, the law resting upon, and having been entirely developed by, the jurisprudence. This non-legislative approach to causation is found in Scotland too. Does this suggest that neither jurisdiction considers causation an especially important part of the delictual analysis? Not at all. Both jurisdictions view the causal issue as a crucial stage in a delict/tort action, and one to which their highest courts have turned their attention at various points. Indeed, although Scotland is a small jurisdiction, it was two Scottish appeals to the House of Lords, Wardlaw v Bonnington Castings* and McGhee v National Coal Board, that were largely instrumental in defining the approach of courts across the United Kingdom to causation-in-fact in the twentieth century. Such judicial inventiveness has also been a hallmark of the Louisiana courts, which developed the so called ‘duty-risk’ analysis to the attribution of responsibility to causes-in-fact at a time when the Common Law jurisdictions of the United States were still languishing in the juristic darkness of ‘proximate cause’ thinking. Causation can thus be argued to be a topic worthy of inclusion in this volume both because of interesting jurisdictional peculiarities of approach as well as because it is a topic which shows the courts of the two systems at their creative best, even if, as is suggested below, that judicial creativeness has been somewhat selective and is in need of further exercise.

In order to understand the way in which causation as a requirement of the analysis of delict/tort is treated in both Scotland and Louisiana, it is useful at the outset to appreciate certain important procedural as well as analytical differences between the two systems in their general treatment of actions for negligence.

(1) Procedural differences between the two jurisdictions

A number of procedural differences between the two jurisdictions are worthy of comment. Firstly, there is the theoretical distinction between a system like Scotland, which recognises the doctrine of judicial precedent (stare decisis), and one like Louisiana, where courts are not generally bound by individual judicial decisions but will show deference to an established body of case law (jurisprudence constante). Such a distinction can be overstated, however. In fact, Louisiana does recognise what may be called ‘vertical’ stare decisis, that is the doctrine that inferior courts are bound by the jurisprudence of the Supreme Court, even if this extends only to a single decision of that court on an issue. Furthermore, it seems clear that Louisiana’s jurisprudence constante approach has permitted several established causal rules to become generally accepted within the law. These judicially recognised doctrines are important, given that the idea of causation is not explained in any way in the Civil Code.

---

* Senior Lecturer, The School of Law, University of Edinburgh.
1 1956 SC (HL) 26, [1956] AC 613.
3 In particular, through development of the ‘material contribution’ and ‘material increase in risk’ tests in causation-in-fact, discussed below.
5 CC Art 2315(A) states: “Every act whatever of man which causes damage to another obliges him by whose fault it happened to repair it.” Other provisions use the language of ‘occasion’ rather than fault, for instance CC Art 2316 which states: “Every person is responsible for the damage he occasions not merely by his act, but by
One should not, therefore, overplay the significance of the *stare devises/jurisprudence constante* divide.

Secondly, negligence cases are for the most part disposed of in Louisiana by way of jury trial, in Scotland by way of a judge sitting alone. It is usually impossible to know what juries thought about issues of fact, including the question of precisely how causation-in-fact was established (or not) on the facts of a case. To be sure, we have the interrogatories, or instructions to the jury as they are styled in Scotland, given by the judge, which explain to some extent what the court’s view of the idea of causation-in-fact entails, but we do not have reasoning explaining how causal doctrines were applied by the jury to the facts of the case. The prime role of such interrogatories in the process of determination of a case make it vitally important that these are framed correctly by the judge. There has been much academic writing on how such interrogatories ought to be framed. Inevitably, different understandings of the law of tort have impacted upon views as to how a judge ought to approach the exercise of drawing up interrogatories.

Thirdly, and tempering to some extent the frustrating absence of written determination of the facts which more frequent use of jury trials creates, both matters of fact and law may be reviewed by Louisiana courts. In Scotland, *per contra*, findings of fact are very rarely disturbed by civil appeal courts. It is startling to a Scots lawyer in just how many negligence cases Louisiana appeal courts are willing to re-open questions of fact, or indeed to order a rehearing of the case after an initial hearing and determination.

Lastly, it is worth mentioning that, in Louisiana, a distinction is made between cases of negligence *per se*, which involve breach of a statute, and cases of ordinary negligence, that is of non-statutory negligence. In the latter, negligence must be proven as a failure to show reasonable care under a common law duty of care. In the former, breach of the statute is presumed to amount to negligence. Such a distinction between negligence *per se* and ordinary negligence is not made in Scotland. Some Scottish (or United Kingdom) statutes impose strict liability and some fault-based liability. In those which impose fault-based liability, negligence must still be proven by the pursuer.

(2) Analytical differences between the two jurisdictions
The issue of analytical differences between the way in which delictual, in particular negligence, actions are conceived in the two jurisdictions is a relevant one for a discussion on causation as there are a number of theories of how causation should be fitted in to the negligence equation. Competing theories of negligence have been supported by different academics and applied by different courts at various times. The level of theoretical discussion of these different theories of negligence liability among the Louisiana judiciary is startling to the Scots lawyer. One does not find in the Scots cases a serious ongoing debate as to a choice of theories of negligence (or delict in general) which courts might apply.

In Scotland, the accepted judicial view is, broadly, that there was a pre-*Donoghue* way of understanding the general action for reparation in delict, based upon the twin ideas of fault and harm, and a post-*Donoghue* approach based upon duty of care, negligence, causation, and harm (or damage). In the post-*Donoghue* case law there have in addition been noticeable, and essentially UK-wide, shifts in general judicial delictual policy over time, principally:

---

His negligence, his imprudence, or his want of skill.” No practical effect seems to turn on which of the terms ‘cause’ or ‘occasion’ is adopted.

---

D Robertson considers this question at length in “The Vocabulary of Negligence Law: Continuing Causation Confusion”, (1997) 58 La LR 1. He cites, for instance, the case of *Bannerman v Bishop*, 688 So 2d 570, La App 2 Cir,1996, a road traffic injuries case in which, in his view, the fact that a rehearing was needed may have been due to poor interrogatories being given at the first hearing. Robertson favours separate instructions being given in relation to cause-in-fact and ‘legal cause’, on which point T C Galligan, “Cats or Gardens: Which Metaphor Explains Negligence?”, (1997) 58 La LR 35, agrees.

The Louisiana Constitution states that “… the jurisdiction of the supreme court in civil cases extends to both law and facts” (Art V, s 5(C)). The same jurisdiction applies to other courts of appeal: ibid. s10 (B).The effect in Louisiana of this appellate jurisdiction has been to reduce the importance of trial by jury, since the upper court judges can more easily review the errors of fact finding. Counsel may therefore not choose trial by jury to begin with.

However in Scotland (as in Louisiana) some circumstances give rise to a presumption of negligence under the doctrine of *res ipsa loquitur*.

See, for instance, the Occupiers’ Liability (Scotland) Act 1960.
(i) a 1970s/early 1980s expansionist attitude to liability based upon the idea that foreseeability of harm should lead to liability unless some other factor mitigated against imposing it;\(^{10}\)

(ii) a mid/late 1980s onwards policy that delictual liability should expand only incrementally, by analogy with existing recognised categories; and

(iii) a further policy, following the decision of the House of Lords in \textit{Caparo v Dickman} \(^{11}\) in 1990, that foreseeability of harm alone will be insufficient to establish a duty of care in many types of action (especially those involving pure economic loss), but rather that the demonstration of ‘proximity’ (a close relationship between the parties) will also be required in such cases, as well as a demonstration that imposition of a duty is consistent with considerations of justice, fairness and reasonableness.

These shifts in policy have, as a result of the operation of \textit{stare decisis}, taken effect across the courts as a whole (with perhaps a few maverick exceptions). Thus, the continuing debates which one sees among the Louisiana bench on the preferred model of tort \(^{12}\) are missing from judicial considerations in Scotland, although such debates continue to take place among the academic community.

Each of the competing models of tort in Louisiana share certain commonalities, principally an understanding that the elements in the tortious equation include at least the following stages:

(1) proof that the defendant's substandard conduct was a cause-in-fact of the plaintiff's injuries (the cause-in-fact element);

(2) proof that the defendant's conduct failed to conform to the appropriate standard (the breach element);

(3) proof that the defendant had a duty to conform his conduct to a specific standard (the duty element);

(4) proof that the defendant's substandard conduct was a legal cause of the plaintiff's injuries (the scope of liability or scope of protection element); and

(5) proof of actual damages (the damages element).\(^{13}\)

These basic elements of the negligence analysis are also shared by Scots Law, although some of the terminology traditionally used to describe them differs from the Louisiana terms, and two of the stages are usually conflated. The typical Scottish approach is to analyse a negligence case by considering the following elements:

(1) the existence of a duty of care on the part of the defender towards the pursuer (the duty of care element);

(2) breach of that duty of care by the defender (the standard of care or breach element);

(3) proof that the defender’s breach of duty was both a factual and a legal cause of the pursuer’s injuries (the causation element); and

(4) the injury/harm sustained must not be ‘too remote’ from the harmful conduct (the remoteness of damages element).

The Scottish analysis thus considers cause-in-fact and so-called legal causation under a single causal umbrella, although the two enquiries may be, and preferably are, considered separately. It should also be noted that there is a tradition in Scotland of further breaking down the duty element into two subordinate questions: (1) whether the duty of care alleged was of a kind which is capable of arising, and (2) whether, in the specific circumstances of the case, the injury was of a kind which was too remote from the duty (the remoteness of injury issue). The terminology of ‘remoteness of injury’,

\(^{10}\) A policy which reached its apoee in \textit{Anns v Merton London Borough Council} \([1978]\) \textit{AC} 278, \([1977]\) 2 All ER 492, HL.

\(^{11}\) \([1990]\) 2 AC 605, \([1990]\) 1 All ER 568, HL.

\(^{12}\) Robertson has identified six models, viz: (i) a Keetonian model (based upon the theories of Prosser & Keeton), (ii) a Cardozo model, (iii) a Leon Green model, (iv) a Holmesian model, (v) a ‘judicial legislator’ model, and (vi) an ‘absorbing the breach inquiry into the duty issue’ model, each of which is explained more fully in D Robertson, “Allocating authority among institutional decision makers in Louisiana state-court negligence and strict liability cases” (1997) 57 La LR 1079.

\(^{13}\) Per Kimball J, for the majority of the Supreme Court, in \textit{Perkins v Entergy Corp et al} 782 So 2d 606, La 2001. See, to similar effect, Robertson, n 12, at 1091.
apart from being confusingly similar to that of the ‘remoteness of damages’ under stage 4, will be quite unfamiliar to Louisiana lawyers, who may justifiably wonder what purpose it serves. In fact, the issues of so-called legal causation and ‘remoteness of injury’ seem to be in large part about the same thing, namely whether the type of harm which arose in the circumstances was of a kind for which the law should provide recovery (a normative question).

The Scottish analysis is far from unproblematic. Not only will it be argued later that a number of Scottish causal ideas require to be judicially overhauled, but the general approach to the other elements in the delictual equation might also be said to be in need of such an overhaul. In this respect, the Louisiana analysis seems, from an outsider’s perspective, to have been more carefully considered and developed, although this may be more providential than by design.

Having given this general overview of differences between the two jurisdictions in the relevant procedural aspects of delictual claims, having sketched out the extent to which the theoretical analysis of negligence may be said to equate, and having provided some brief remarks on where causation fits into this analysis, it is now appropriate to consider the doctrine of causation in both Scotland and Louisiana.

B. SEPARATION OF CAUSE-IN-FACT FROM MATTERS AFFECTING THE SCOPE OF LIABILITY (‘LEGAL CAUSATION’)

In both jurisdictions there is recognition that causation-in-fact (that is, causation as it operates in the real world) and matters affecting the scope of liability for consequences (what has traditionally been called ‘legal causation’) should be considered separately. Terminology however continues to confuse.

In general the following can be said:

(a) Scotland continues the tradition of bringing within the topic of ‘causation’, widely drawn, the separate enquiries of causation-in-fact and matters affecting the scope of liability for consequences, referring to the latter as ‘legal causation’.14 There is a growing academic view that the bunching of these two quite different enquiries under a general heading of causation is unhelpful and productive of confusion,15 although this academic shift in opinion has yet to be reflected in judicial attitudes.16

(b) Louisiana has for the most part abandoned the terminology of ‘legal cause’, and has moved to a ‘duty/risk’ analysis of matters affecting the scope of liability for consequences. The duty/risk approach asks whether the risk and the harm caused were within the scope of protection afforded by the duty breached.17

I have argued elsewhere,18 along with others, that the use of the term ‘legal causation’ is unhelpful, and masks essentially normative, policy driven considerations.19 The Louisiana preference for the

---

14 While there remains a greater tendency to adopt the language of legal causation in Scotland, the term has been used on occasion by the Louisiana courts, not always helpfully. One may note, in this regard, the comments of Sanders J in Dixie Drive It Yourself, 242 La 471, 137 So 2d 298, LA 1962, who remarked (La 471 at 481-482) that “[t]here is no universal formula for the determination of legal cause. In the instant case it bifurcates into two distinct inquiries: whether the negligence of the obstructing driver was a cause-in-fact of the collision; and whether the defendants should be relieved of liability because of the intervening negligence of the driver of the Dixie truck.” This comment seems to suggest a styling of the total causal enquiry as one of ‘legal cause’, with causation-in-fact as one subset of this enquiry. Such an approach is not shared in other decisions or by Louisiana commentators in general.


16 In a public address given at a Conference on ‘Causation in the Law’, University of Birmingham, 28 April 2007, Lord Hoffmann, the leading British judge with an interest in causation, made it clear that he prefers an analysis by which all matters affecting both causation-in-fact and the scope of liability are analysed under the single head of (legal) causation, asserting that causation is always contextual to the discipline (such as law) in which it is applied. See, to similar effect, his earlier published remarks in 2005 LQR 592, itself the published text of a prior conference address.

17 See, for instance, Hall J in Roberts v Benoit, 605 So 2d 1032, 1051 (La 1992).

language of ‘duty/risk’ and ‘scope of liability’ enables more clearly a proper understanding of the policy nature of the scope of liability for consequences question. As was said in Roberts v Benoit,20

The most critical issue in the instant case is whether the injury plaintiff sustained was within the contemplation of the duty discussed above. There is no “rule” for determining the scope of the duty. Regardless if stated in terms of proximate cause, legal cause, or duty, the scope of the duty inquiry is ultimately a question of policy as to whether the particular risk falls within the scope of the duty.

Such a clear policy base to this consideration is often lost sight of in Scotland, where the ‘legal cause’ analysis typically involves consideration of the issue of whether a supervening cause (novus actus interveniens) has ‘broken the chain of causation’ between the harm and the cause-in-fact under examination such as to exculpate that cause from any responsibility for the harm. The tenor of the language used in that consideration suggests a policy-free, scientific investigation, which in reality is not the case.

There is some debate among Louisiana commentators as to whether determination of the scope of the duty, and whether the risk and harm fall within the scope of that duty, should lie with the court or with the jury.21 In Professor Robertson’s view, scope of duty questions in common law negligence cases, while policy based, are best left to juries, for the reason (in his view) that

the rule whose scope of protection is tested by the legal cause inquiry comes … from the trier of fact itself. The rule’s proper scope of protection is a “question of policy,” all right. But it is the trier of fact’s own policy.22

To Scottish eyes this view – that it is, in effect, ‘the people’ who decide the scope of duties of care – seems somewhat idealistic, deriving perhaps from a different conception of constitutional theory. A Scots lawyer would be more likely to say that common law duties imposed upon us by the law of delict derive from formulation of such by the courts, albeit with regard to the expectations of society at large. Robertson’s view is not shared by other Louisiana commentators. Professor Crawford, referring to the policy approach enunciated in Roberts v Benoit in the earlier quotation, has argued that “it is well-recognized that questions of policy are for the court, while questions of fact are for the jury.”23

Professor Galligan, while agreeing that for the most part juries are the appropriate bodies to decide scope of protection questions, takes the view that, in a not inconsiderable number of cases, judges should feel free to decide upon the matter, noting that

Louisiana, arguably more than any other state, has a rich and vibrant tradition, inspired by Wex Malone, such that it is appropriate for judges to decide the scope-of-duty issue. It seems a shame to abandon that tradition when it still has current meaning to many judges in many cases.24

Galligan supports his argument by reference to a number of cases which were decided according to the so-called ‘Green-Malone’ model of tort, under which scope of duty questions are a matter for the judge.25

---

19 This argument is considered further below, at section D of this chapter.
20 Per Hall J, 605 So. 2d 1032, 1051, at 1044.
21 Art 1812 (C) of the Louisiana Code of Civil Procedure (CCP) states that “In cases to recover damages for injury, death, or loss, the court at the request of any party shall submit to the jury special written questions inquiring as to (1) Whether a party from whom damages are claimed, or the person for whom such party is legally responsible, was at fault, and, if so: (a) Whether such fault was a legal cause of the damages” (emphasis added). All that the CCP thus tells us is that in some cases the jury is to determine legal causation; this leaves the position in other cases undetermined.
23 W Crawford, “Tort Law” (La Civil Law Treatise, vol XII: 2000), ch 1, para 1.16.
24 T Galligan, “Cats or gardens: which metaphor explains negligence? Or, is simplicity simpler than flexibility?” 1997 58 La LR 35, at 61.
25 Galligan cites, inter alia, Francisco v Joan of Arc Inc 692 So. 2d 598 (1997 La App), and Tassin v State Farm Insurance Co 692 So. 2d 604 (1997 La App). He also cites in this respect what he calls “Louisiana’s most famous
This judge/jury debate is, of course, of somewhat limited importance for the Scottish legal system, where virtually no negligence cases are determined by way of jury trial. The Scottish judiciary exclusively determine the scope of duties of care, and thus the breach to which any harm must be causally linked.

C. CAUSE-IN-FACT

In both jurisdictions, in common with all other Western legal systems, the basis test of causation-in-fact is the *sine qua non* or ‘but for’ test. In both jurisdictions this test has been developed by the courts, for, while Louisiana possesses a Civil Code and Scotland does not, the former’s codal provisions provide only that “[e]very act whatever of man that causes damage to another obliges him by whose fault it happened to repair the damage”, without specifying the test by which causation-in-fact is to be determined.

The operation of this test, by the use of counterfactual analysis, is well documented in other commentaries on causation. So too is the inability of this basic test to provide an acceptable answer in a number of causally problematic scenarios, an inability which has prompted both Scotland and Louisiana to develop alternative tests in an attempt (not wholly satisfactory) to deal with such problematic scenarios. Among such scenarios two archetypal situations are those where two or more antecedent causes combine to produce an outcome which could have been produced by any one of the causes operating alone (cases of so-called ‘over-determined’ causation, such as the ‘double hit hunters’ cases), and cases where a sole cause has produced an outcome but it is unclear which of a number of possible causes was the operative one (cases of indeterminate causation, such as the so-called ‘single hit hunters’ cases). Both jurisdictions struggle to provide a clear analysis of how to approach such cases.

In order to deal, it is said, with cases falling within the first of these two types (over-determined outcomes), the Louisiana courts have developed an alternative test to the *sine qua non* test, namely the ‘substantial factor’ test. One asks, in applying this test, whether the defendant’s conduct was a substantial factor in bringing about the outcome. This appears to mean (on one view, and there are several) whether the conduct made a significant contribution to the outcome. Problematically, however, there has been a tendency to employ this test not merely in cases of over-determined outcomes but generally in cases where more than one antecedent factor (whether occurring concurrently or consecutively) is considered a potential cause-in-fact of an outcome. Its use in such cases of multiple, but not over-determined, causation, may be seen in a number of decisions of the Louisiana courts. It is difficult to see what assistance substantial factor may be thought to provide to courts in cases other than of over-determined causation, or indeed why ‘but for’ cannot provide a satisfactory answer to such cases. As the Reporter to the draft of the *Third Restatement of Torts* put it

> With the sole exception of multiple sufficient causes, “substantial factor” provides nothing of use in determining whether factual cause exists … Recognition that a factual cause does not have to be the sole cause of harm … obviates any need for substantial factor as a test for causation. Indeed, the substantial-factor standard is no better, and perhaps worse, than but-for in avoiding the misconception that a single cause must be found for an outcome: the key appreciation is that any cause need only be one of many,

---

26 CC Art. 2315 (A). In failing to specify a specific test for causation, the Louisiana Code is similar to the French Code.

27 See, for instance, explanation of counterfactual analysis in Wright, Stapleton, or Hogg, supra n 15.

28 So-called by reference to the scenario of a plaintiff who is killed by bullets from two or more weapons, the impact of any of the bullets alone being sufficient to have resulted in the death.

29 So-called by reference to the scenario of a plaintiff who is killed by a single weapon, but it is unclear which of a number of possible weapons was responsible.

30 See, for instance, *Dixie Drive It Yourself v American Beverage* 242 La. 471, 137 So.2d 298 (1962); *Roberts v Benoit* 605 So. 2d 1032, 1051 (La 1992); *Perkins v Entergy* 782 So 2d 606 (La 2001); *Andry v Murphy Oil* 935 So. 2d 239 (La 2006); *Thibodeaux v Stonebridge LLC* 873 So 2d 755 (La 2004); *Toston v Pardon* 874 So 2d 791 (La 2004).
whether one uses but-for or substantial-factor language, and the latter may lead a jury erroneously to believe that it must search for a single or most significant factor.\textsuperscript{31}

This criticism is well made. Recognising that a ‘but for’ cause may contribute to harm, without its having been necessary for the harm to have occurred at all, is surely sufficient to deal with cases where a cause is not necessary for an outcome but can be shown to have contributed to a portion of the overall harm caused. This is recognised in Scots Law by the recognition that to be a cause-in-fact, a factor need not have been the sole cause of an outcome, but merely have materially contributed to that outcome.\textsuperscript{32}

Whatever the merits of employing substantial factor in cases of over-determined causation (and I have argued elsewhere that the NESS test of causation-in-fact would be better suited to solving such cases)\textsuperscript{33}, or indeed in multiple factor cases in general (where ‘but for’ seems perfectly capable of dealing with many of the cases), its employment in the second common causally problematic case, that of causal indeterminacy, is even more troublesome. A good recent example of the substantial factor test being brought to play in such a case of indeterminacy – where the court was unsure, using the but for test, which one of (or perhaps several of) a number of possible causes had produced an injury – is the decision of the Fourth Circuit of the Louisiana Court of Appeal in \textit{Andry v Murphy Oil}.\textsuperscript{34} In a case concerning the complex events leading up to an explosion at an oil refinery, events begun by a lightning strike and followed by attempted repairs undertaken by employees both of the oil company (Murphy) and of an energy company (Entergy), Tobias J, applying substantial factor analysis, said of the question of whether the actions of the employees of the energy company had been a cause-in-fact of the explosion that

\textit{We find that the trial court had sufficient evidence to find that the negligence of Entergy’s employees played so important a role in producing the explosion and fire that responsibility should be imposed on Entergy, even if we cannot say definitely that the harm would not have occurred “but for” its employees actions.}\textsuperscript{35}

This is a somewhat problematic statement. If the behaviour of Entergy’s employees was not to be considered a ‘but for’ cause of the injury, it is unclear precisely how the court saw their behaviour as playing ‘so important a role’ in the explosion that it was a cause of it. It may be that the court felt intuitively that the actions of the defender’s employees must have been important to the outcome, and thus inferred as much,\textsuperscript{36} without being able to furnish a clear statement as to the precise basis on which causal connection was established, but, if so, adoption of the concept of substantial factor merely masks the judicial reasoning. If this was indeed simply a case of an intuitive judicial sense that a cause must have made a contribution to an outcome, it could be said to bear comparison with the approach of the House of Lords in the Scottish appeal \textit{Wardlaw v Bonnington Castings},\textsuperscript{37} which established causation-in-fact on the basis of the defender’s ‘material contribution’ to an injury, even though the evidence supporting such a material contribution seems to have been inferred rather than demonstrably proven.\textsuperscript{38}

\textsuperscript{31} Restatement of the Law Third, Torts: Liability for Physical Harm (Basic Principles) (Tentative Draft No 2, March 25, 2002), para 26, Reporters’ Notes to Comment J.
\textsuperscript{32} \textit{Wardlaw v Bonnington Castings} 1956 SC (HL) 26, [1956] AC 613.
\textsuperscript{33} The NESS test asks whether a cause-in-fact was a Necessary Element for the Sufficiency of a set of antecedent conditions Sufficient for the occurrence of the outcome (the capitalised letters explaining the acronym NESS): see further Hogg 2005 JR 89 or 2007 ELR 1.
\textsuperscript{34} 935 So 2d 239, La App 4 (2006).
\textsuperscript{35} 935 So 2d 239, at 259.
\textsuperscript{36} In fact, Tobias J having just stated that but for causation in relation to the behaviour of Entergy was not established, goes on to state (935 So. 2d 239, at 259) that “Certainly, all three elements, namely the switching errors [the behaviour of Entergy’s employees], the defective valve, and relighting efforts [the behaviour of Murphy’s employees], were necessary components leading to the explosion and fire.” If that is so, then the behaviour of Entergy’s employees was a \textit{sine qua non} of the explosion. In this respect, the analysis of Tobias J seems somewhat confused.
\textsuperscript{37} 1956 SC (HL) 266, 1956 SLT 135.
\textsuperscript{38} See Michael Jones, \textit{Medical Negligence} (2003), who comments (at para 5-020) of the decision: “the courts were willing to draw an inference of fact that there had been a material contribution when it was in reality impossible to say whether there had been any such contribution”. 08/08/2014
If the court in *Andry* was indeed making such an inference of causal connection, a comparison might also be drawn with the approach adopted in Louisiana personal injury cases where plaintiffs are permitted to make use of the so-called ‘Housley presumption’ in establishing causal connection. 39 This rebuttable presumption holds that a medical condition producing disability is presumed to have resulted from an accident if, before the accident, the injured person was in good health, but shortly after the accident, the disabling condition manifested itself - providing that the medical evidence shows there to be a reasonable possibility of causal connection between the accident and the disabling condition. In order to defeat this presumption, the defendant must show some other particular incident caused the injury. 40

This expression of the Housley presumption is noteworthy in its reference to the plaintiff’s demonstration of a ‘reasonable possibility’ of causal connection between harm and medical condition, which is not the same as actually demonstrating such causal connection. So long as this reasonable possibility of causal connection can be shown, the burden of proof will then be transferred to the defendant. In a case in which the presumption was applied, 41 it was held applicable because the medical condition (a lumbar hernia following a traffic accident) was capable of arising after the type of accident in question, and because of a lack of any other realistic alternative cause of the injury. This sort of reasoning arguably equates to what the court in *Andry* was doing, even though the Housley presumption was inapplicable in *Andry* given that the injury caused was not the subsequent development of a medical condition.

While Scottish courts never explicitly make use of a Housley type presumption, and would say if asked that the burden of proving causation (and not of simply showing a reasonable possibility of causal connection) always rests on the pursuer, they may arguably be achieving a similar result where they find for a pursuer in a case in which a negligent act, capable of resulting in a harm, is indeed followed by such harm, albeit that an unknown alternative factor might instead have caused the harm. In reaching such a conclusion, however, they will, in those cases where loss of a chance analysis is not employed, justify their decision by stating that the presence of the antecedent operative factor under examination must be taken to have made a material contribution to the outcome. Such was the reasoning in the Wardlaw decision, referred to above.

Substantial factor can thus, in some Louisiana cases, be equated to the Scots idea of material contribution. In other Louisiana cases, however, something’s being a substantial factor, and thus ‘playing an important role’ in an outcome, seems to be more akin to what Scots Law would until recently have called ‘materially increasing the risk of injury’. A case in point is *Roberts v Benoit*,42 an important decision of the Louisiana Supreme Court pre-dating *Andry*. In discussing whether the negligence of the Sheriff’s Department was a cause-in-fact of an injury sustained by an individual when a firearm was discharged by an improperly promoted and poorly trained deputy sheriff (Benoit), Cole J said (on a rehearing)

> It is likely that this accident might have occurred had Benoit, who already owned a weapon, never been commissioned. Thus, it is impossible to say with any degree of certainty, “but for” the sheriff's conduct, this accident would not have happened. Nonetheless, inasmuch as the sheriff's actions can be said to have appreciably enhanced the chance of the accident occurring, they are a cause-in-fact of the accident.43

Here substantial factor is equated with increasing the risk of injury, an explanation which immediately draws comparison with the analysis of the House of Lords in the Scottish appeal *McGhee v NCB*44 that

---

39 After its formulation in *Housley v Cerise* 579 So 2d 973 (La 1991). The presumption was applied recently in *Michelle Detraz v Victor Lee D/B/A Virgin Nails* 950 So 2d 557 (La 2007), a decision of the Louisiana Supreme Court in which an original finding in fact by the jury that causation had not been made out by the plaintiff was reinstated on appeal.
40 As summarised by Victory J, in *Michelle Detraz v Victor Lee D/B/A Virgin Nails* 950 So 2d 557, at 560.
41 Marlo Dabog v John Deris 625 So 2d 492 (La 1993).
42 605 So 2d 1032, 1051 (La1992).
43 605 So 2d at 1052.
a material contribution to an injury might (in a limited class of case) be constituted by a factor which materially increases the risk of that injury occurring, an approach recently recast by the House of Lords in *Barker v Corus*[^45] in terms of liability for loss of a chance.

This risk-creation usage of substantial factor as an alternative test to ‘but for’ in some cases of causal indeterminacy was however criticised in the commentary to the *Restatement of Torts Third*, which argued that

To be sure, courts may decide, based on the availability of evidence and on policy grounds, to modify or shift the burden of proof for factual cause, as they have when multiple tortfeasors act negligently toward another but only one causes the harm … Courts may, for similar reasons, decide to permit recovery for unconventional types of harm, such as a lost opportunity to avoid an adverse outcome. Nevertheless, the substantial-factor rubric tends to obscure, rather than to assist, explanation and clarification of the basis of these decisions. The element that must be established by whatever standard of proof is the but-for or necessary-condition standard ...[^46]

The decision in *Barker* that causal indeterminacy in such cases is best addressed by a finding of a loss of a chance, at least answers this criticism and avoids the unorthodox approach previously taken in *McGhee* that risk creation could be equated to material contribution.

The complexity of the substantial factor debate does not end there, as ‘substantial factor’ has in fact been employed in some decisions not as an alternative test of causation-in-fact but simply as a synonym for a necessary, or ‘but for’, cause. This only serves to obfuscate matters further. Such synonymous application is found in the leading Louisiana case on *sine qua non* causation, *Dixie Drive It Yourself System v American Beverage.*[^47] The case concerned a road traffic accident caused when the defendant’s vehicle, which had negligently been parked on the highway, was struck from behind by a second vehicle owned by the plaintiff. One of the questions for the court was whether the defendant’s actions had been a cause-in-fact of the harm, a question answered by the Supreme Court in the affirmative. In relation to the issue of causation-in-fact, Sanders J stated

> Negligent conduct is a cause-in-fact of harm to another if it was a substantial factor in bringing about that harm. Under the circumstances of this case, the negligent conduct is undoubtedly a substantial factor in bringing about the collision if the collision would not have occurred without it. A cause-in-fact is a necessary antecedent.

While the reference to a cause-in-fact’s being a necessary antecedent is a clear reference to the *sine qua non* test, a test given a strong foundation in this decision, the equation of *sine qua non* with the idea of substantial factor muddies the waters, and adds nothing to the analysis. Nonetheless, the Supreme Court of Louisiana still continues to issue judgments in which substantial factor and *sine qua non* are used interchangeably. In the recent case of *Toston v Pardon*[^48] the Supreme Court summed up the causal enquiry thus

> A party's conduct is a cause-in-fact of the harm if it was a substantial factor in bringing about the harm … The act is a cause-in-fact in bringing about the injury when the harm would not have occurred without it … While a party's conduct does not have to be the sole cause of the harm, it is a necessary antecedent essential to an assessment of liability.[^49]

Given the multifarious roles which substantial factor has been asked to play, one is forced to conclude that the phrase does not seem susceptible of any clear definition. It has been used as a synonym for but for; it seems to have been used to mean something similar to what Scottish courts have called material contribution, that is in a factor’s being a contributing but non-necessary cause; and it has been used to indicate a factor which increases the risk of injury occurring, as in the Scottish

[^46]: Section 27, Comment j.
[^47]: 242 La 471, 137 So 2d 298 (1962).
[^48]: 874 So 2d 791 (La 2004).
[^49]: 874 So 2d 791, at 799.
material increase in risk concept. The varied and inconsistent uses to which the concept has been put suggest that the Louisiana courts are somewhat at sea in their analysis of causation-in-fact. ‘Substantial factor’ has taken on the appearance of a shibboleth, produced on any occasion when causal problems arise, allowing a court simply to act intuitively without recourse to any clear explanation of the basis for its decision. Adoption of a more robust test would not only give clearer guidance to the courts in determination of causation-in-fact, but would allow clearer analysis to be made by jurists. In Scotland, while the material contribution test is clearly established, and Barker v Corus has rescued factual causation from a dubious increase in risk approach, the courts too struggle to analyse the hard cases in a clear and principled way.

As the present time, both the Scottish and Louisiana courts seem hesitant to develop the rules in relation to proving causation-in-fact in ways which reflect academic development of the law in this field. This may be because courts are timid of a subject perceived as full of logical pitfalls. If that is so, then the legal academic community needs to convince the judiciary that a more developed analysis of causation-in-fact is both possible and practicable.

D. SCOPE OF LIABILITY

In both jurisdictions the terminology of legal causation remains in use, although Louisiana is demonstrating a growing preference for abandoning it in favour of the terminology of ‘scope of liability’. I have previously argued, in common with other commentators, that Scottish (and indeed English) Law would be immeasurably improved were it to follow such a revisionist course. The language of legal causation is apt to confuse, suggesting as it does that what are essentially normative, policy issues should be treated as if they were logical matters of cause and effect. The Scottish courts, however, unlike those of Louisiana, have not decisively broken with the language of ‘legal causation’: the legacy of Hart and Honoré remains, in this respect, influential in Scots legal thinking.

(1) Louisiana

In Louisiana the language of ‘proximate cause’ to describe those causes-in-fact deemed sufficiently important to attract responsibility for harm, language traditionally popular in Common Law state jurisdictions, is absent from the modern law, a development which has been generally welcomed by the academic and judicial community alike. The move away from proximate cause terminology, a shift now also gaining ground in Common Law state jurisdictions, began with the Dixie Drive It Yourself case. The Court of Appeal had expressly adopted proximate cause analysis:

Whatever negligence may have been involved on the part of the driver of the defendant vehicle had become passive and too remote to be a contributing cause of the accident. The sole proximate cause thereof was the negligence of the driver of the plaintiff truck. The defendant is not liable because the negligence of its employee-driver was not a proximate cause of the accident.

Such language, however, as well as the idea that the party who had the last opportunity to avoid an injury ought to be held solely responsible for it, was specifically criticised by the Supreme Court, which commented,

The thrust of this formulation of law is toward relieving all but the last wrongdoer of liability to an innocent victim in torts involving intervening negligence. This restrictive

---

50 See M Hogg, “The role of causation in delict”, 2005 JR 89. See also Stapleton and Wright (cit at n 15).
51 H Hart and T Honoré, Causation in the Law (2nd ed, 1985)
52 Influential in this respect are the current draft provisions of the Restatement of the Law, Third: Torts, which have abandoned ‘proximate cause’ terminology in favour of ‘scope of liability’ terminology: see Torts: Liability for Physical and Emotional Harm, ch 6, draft provisions. On the other hand, the US Supreme Court is still adopting the terminology of ‘proximate cause’: see, for instance, its recent deployment in Dura Pharmaceuticals Inc v Broudo, 544 US 336, 342 (2005).
54 128 So 2d 841, at 843, per Samuel J.
doctrine finds little support in legal theory. We do not subscribe to the formulation as applied in this case.\textsuperscript{55}

The Supreme Court emphasised instead that the proper consideration of the significance of possible causes was to be found in a duty/risk analysis, Sanders J commenting:

The essence of the present inquiry is whether the risk and harm encountered by the plaintiff fall within the scope of protection of the statute. It is a hazard problem. Specifically, it involves a determination of whether the statutory duty of displaying signal flags and responsibility for protecting traffic were designed, at least in part, to afford protection to the class of claimants of which plaintiff is a member from the hazard of confused or inattentive drivers colliding with stationary vehicles on the highway.\textsuperscript{56}

The decision in \textit{Dixie Drive It Yourself} did not mark a clear-cut end to the use of proximate cause terminology. Five years later, in its decision in \textit{Pierre v Allstate Insurance},\textsuperscript{57} the Supreme Court was still describing its conclusions in terms of “the primary direct and proximate cause of the accident” being the negligence of the driver of a vehicle.\textsuperscript{58} Despite this hiccup, the rejection of ‘proximate cause’ terminology laid down in \textit{Dixie Drive It Yourself} was confirmed by the Louisiana Supreme Court in \textit{Roberts v Benoit},\textsuperscript{59} where the Court pointedly noted that “[t]he very term ‘proximate cause’ is fraught with confusion, as it has nothing to do either with cause or proximity.”\textsuperscript{60} Adding support to the view that the language of causation should be restricted to causation-in-fact alone, the Court followed up this remark with the observation that “[o]nce it is determined the conduct is a cause-in-fact of the injury, all causation inquiries are complete.”\textsuperscript{61}

The Louisiana courts have given further consideration as to how precisely to evaluate the scope of liability question through the idea that the matter may be tested by reference to the ‘ease of association’ question, in other words by asking whether the harm which befell the plaintiff is easily associated with the type of conduct engaged in by the defendant.\textsuperscript{62} This doctrine stems from the important case of \textit{Hill v Lundin}\textsuperscript{63}. In that case, a maid fell over a ladder on the premises of her employer. The ladder belonged to a construction company doing work at the premises. Its employees had left the ladder standing against a wall. An unknown person subsequently placed the ladder on the ground. Although the maid had noticed the ladder on the ground, in her haste to stop a child of the family running over it, she tripped over the ladder and was injured. The maid sued the construction company. The Supreme Court held that the company was not liable for the maid’s injuries. Barham J said

The basic question, then, is whether the risk of injury from a ladder lying on the ground, produced by a combination of defendant's act and that of a third party, is within the scope of protection of a rule of law which would prohibit leaving a ladder leaning against the house.

Foreseeability is not always a reliable guide, and certainly it is not the only criterion for determining whether there is a duty-risk relationship. Just because a risk may foreseeably arise by reason of conduct, it is not necessarily within the scope of the duty owed because of that conduct. Neither are all risks excluded from the scope of duty simply because they are unforeseeable. The ease of association of the injury with the rule relied upon, however, is always a proper inquiry.\textsuperscript{64}

\begin{footnotesize}
\textsuperscript{55} 242 La 471, at 487- 488.
\textsuperscript{56} 242 La 471, at 488.
\textsuperscript{57} 257 La 471, 242 So 2d 821, 829 (1970).
\textsuperscript{58} 257 La 471, at 481.
\textsuperscript{59} 605 So 2d 1032, 1051 (La 1992).
\textsuperscript{60} 605 So 2d at 1052.
\textsuperscript{61} 605 So 2d at 1052.
\textsuperscript{62} See judgment of Cole J in \textit{Roberts v Benoit}, 605 So 2d 1032, 1051 (La1992), at 1054.
\textsuperscript{63} 260 La 542, 256 So 2d 620.
\textsuperscript{64} 260 La 542, at 548 – 549; 256 So 2d 620, at 622.
\end{footnotesize}
How does one decide whether an injury can be ‘easily associated’ with conduct? Foreseeability of the result appears in the eyes of the courts to play some part in the matter, but not by any means an exclusive role. Even just considering the question of foreseeability, however, what does one have to foresee: is it that conduct is likely to cause an injury? Or that it is very likely so to do? And what considerations other than foreseeability are relevant, or may override that of foreseeability? More content requires to be given to the ease of association concept if it is to serve as a useful test.

There is no established equivalent to this ease of association analysis in Scotland, and it must be questionable whether such a single and somewhat vague concept can adequately address all the matters that a legal system would wish to consider when determining whether causes-in-fact are to be deemed sufficiently significant to attract liability. Additionally, if as Professor Robertson argues, the ease of association idea is designed to answer the question whether the rule of law violated by the defendant was designed to protect the plaintiff’s general class of persons against the harm the plaintiff suffered, the further problem arises that, in Scots Law at least, this is a question which, while doubtless affecting consideration of the traditionally styled ‘legal cause’ issue, has also been thought appropriate for consideration under the earlier stage of analysis of the scope of the duty of care (especially the so-called ‘remoteness of injury’ question, alluded to earlier). Deciding where, in the analysis of delict, to consider such policy questions has troubled Scots Law, so that there has been no single way of analysing such issues, as will now be seen.

(2) Scotland

While reliance upon the doctrine of ‘last opportunity’ rejected in Dixie Drive It Yourself has also been departed from in Scotland, the phraseology of ‘proximate cause’ is still encountered in the Scottish courts (although less frequently so than in England). Use has also been made in Scotland of similar terms such as ‘direct’, ‘real’ or ‘decisive’ cause, or causa causans (‘causing cause’), terminology which expresses a similar underlying idea. While it is mostly in the pre-1980s case law that one finds references to ‘proximate cause’ in the judgments, the use of the term causa causans is still frequently encountered in the submissions of counsel and in judgments at all levels.

The clearest Scottish example of reliance on proximate cause terminology in the twentieth century case law is probably the famous decision of the House of Lords in Grant v Sun Shipping Company Limited and Another, concerning the liability for injuries sustained by a stevedore who fell through an uncovered hatch on a ship upon which he was working. The injured man sued both the shipowners, for their failure to fence off the uncovered hatch, and a company which had been carrying out repairs on the ship, the party responsible for having uncovered the hatch. In the Court of Session, it was held that “the true causa causans… and the actual causa proxima was the extreme negligence of the pursuer himself”, whose case was consequently dismissed. The House of Lords overturned this decision, holding that both the ship owners and the ship repairers were liable for the man’s injuries. One of the questions which the House of Lords considered was whether the failure of the shipowners to fence off the hatch was a novus actus interveniens between the negligence of the repairers and the injuries sustained by the pursuer. It is common for the Scottish courts to resolve the so-called legal causal question by asking whether, between the cause under enquiry and the harm suffered, a new,
intervening cause, or *novus actus interveniens*, has arisen. Holding in this case that there was no *novus actus interveniens*, Lord Porter remarked

I see no break in the chain of causation existing between the negligence of the second defenders [the ship repairers] and the subsequent accident. At the vital moment the hatch-covers were off and the light down. That negligence never ceased to operate nor were the second defenders entitled to rely upon someone afterwards coming to put it right … it was still their negligence which directly caused or contributed to the accident.72

In considering whether an action or omission amounts to such a *novus actus interveniens* it has typically been stated that the quality of the intervening conduct, in particular whether it was unforeseeable, unreasonable, or unwarrantable, is a relevant consideration. This does not provide much by way of additional assistance, however. Like the concepts of proximate cause and *causa causans*, the doctrine of *novus actus interveniens* has been similarly criticised by commentators in its suggestion that somehow the question of deciding which of a number of causes-in-fact should attract liability is a neutral, causal question, when it is (or ought to be) an exercise largely based upon normative considerations.73

Does anything turn on the fact that, in the post 1980s Scottish cases, it has been mostly counsel who have employed the language of proximate cause rather than the judiciary?74 For instance, in both *McFarlane v Tayside Health Board*75 and *Sabri-Tabrizi v Lothian Health Board*,76 the phrase was employed in counsels’ submissions to the court but not by the judges. This might be thought to suggest that the concept of ‘proximate cause’ has fallen out of favour with the Scottish bench. However, given the continued frequent judicial use of the similar notion of *causa causans*, it seems clear that the Scottish courts continue to adhere to a traditional view of causation as comprising both cause-in-fact as well as legal causation, and that they consider that the question of legal causation is properly addressed using causal language of some kind. In so doing, a clear distinction may be drawn with the scope of liability approach taken by the Louisiana courts, with its ‘ease of association’ language, language which is not expressly causal but appears, as discussed earlier, to embody an underlying idea of foreseeability of result, among other unspecified considerations. [Just one thought: it is not clear to me how it can be said that that ‘ease of association’ is non-causal language. Doesn’t the association rest on causal experience of some kind? i.e. where there is X, then A, B or C may be usually associated with it, or not - my view of ‘ease of association’ is that it is not an *expressly* causal term. There might conceivably be ways of easily ‘associating’ an injury with a preceding factor other than by applying the standard rules of causation. The Louisiana courts appear to consider ‘foreseeability’ as one consideration amongst other unspecified criteria - see my new text added earlier. While foreseeability has a link to causation, is not expressly causal language.]

The Scottish approach is in need of reform. Such reform, if it is to happen, would best be accompanied by a wider reflection on when the various stages of the delictual analysis are to be employed in specific cases. A new general theory of delict, based upon a proper understanding of the relationship between the constituent elements of a claim, is required. Until that happens, judges will remain unclear as to which of the elements is to be used to explain the decision in particular cases. It is unsurprising that, at the present time, the Court of Session finds itself having to remark in its determination of a negligence claim that the test to be applied has been expressed in various different ways. Sometimes the court has referred to the question of reasonable foreseeability, sometimes the court has referred

---

72 1948 SC (HL) at 89.
73 See Hogg and Stapleton (cit at n 15).
74 Use of the phrase has not been wholly confined to counsel: in *Bell v Lothiansure Ltd* 1993 SLT 421, an understanding between pursuer and defender that the phrase ‘arising from’ in an insurance document meant ‘proximately caused by’ was accepted without demur by the Inner House of the Court of Session, who then spent some time considering authorities on proximate causation.
75 1998 SLT 307.
76 1998 SLT 607.
to remoteness of damage, sometimes the court has asked whether there has been novus actus interveniens, and sometimes the court has looked for the causa causans.77

Such uncertainty concerning the proper approach to the analysis of the facts of delictual claims ought to give rise to concern amongst scholars in the field of delict. There is a compelling case for development of a new academic consensus on the proper approach to the analysis of delict. While such an enterprise cannot be ventured in this paper, it may at least be said that the Louisiana consensus that causal language is inappropriate to the question of the significance of causes would make a good start for Scots law, even if its ‘ease of association’ doctrine seems as yet an unproven and undeveloped way to advance matters.

E. SPECIFIC CAUSAL DIFFICULTIES

(1) Indeterminate causation generally
An indication of how Louisiana courts deal with some issues of causal indeterminacy has already been given earlier in this paper. It was seen that the substantial factor test has been employed not simply in cases of over-determined causation, but also on occasion in cases of multiple consecutive causes where it is unclear, on a ‘but for’ basis, which of the antecedent factors has contributed to the outcome. This was the case in both Andry v Murphy Oil and Roberts v Benoit, in both of which the court expressed doubts that a finding of causation-in-fact would have been possible on a pure ‘but for’ basis. In Andry however there were contradictory statements from the bench indicating that ‘but for’ causation was proven, so that the decision ought not to be taken as solidly establishing the use of substantial factor as a solution to any problem of indeterminacy. However, the adherence in Benoit to the idea that increasing the chances of injury is sufficient for establishing causation-in-fact does indicate a willingness to create a solution to a problem of causal indeterminacy. However, Roberts has not created a substantial judicial shift in favour of the loosening of the ‘but for’ requirement in cases of indeterminacy. There has been no adoption of a general test of material increase in the risk of injury which might be employed in defined and controlled circumstances, such as occurred in Scotland following McGhee v NCB. Benoit was unlikely to be a McGhee, as there was no attempt in the Benoit judgments to provide a coherent rationale for the loosening of the ‘but for’ requirement; instead one senses that the result was driven by a specific policy of discouraging inappropriate appointments in the realm of law enforcement.

As described below in the specific context of asbestos liability, the Louisiana cases suggest that there is no appetite for developing any conceptual analysis to cope with indeterminate causality in general other than by means of the recognition of a limited exception in respect of over-determined causation, an exception based upon the unhelpful and vague concept of substantial factor. Scotland, on the other hand, while failing adequately to provide a coherent test to deal with cases of over-determined causation, did choose to create a radical solution to indeterminate causation by developing the material increase in risk test. This has been subject to recent House of Lords’ realignment in Barker v Corus, discussed below, such that material increase in risk as an alternative test of causation-in-fact has been recast as liability for loss of a chance, a solution which prefers permitting a claim for a different type of harm (a lost opportunity of avoiding harm) rather than a loosening of the orthodox rule that a causal connection must be shown between the wrongful behaviour and a real world harm.

(2) Asbestos related injuries generally
Courts are only too aware of the complexities and varieties in asbestos litigation. As one Louisiana judge put it, “asbestos litigation is like a box of chocolates – the outer covering is familiar, but the taste inside is different, and one never knows what one is going to get.”78 One complexity of Louisiana law, not present in the Scots law, is that claims by employees against employers for work related

77 The comments are those of Lord Justice Clerk Ross in Bell v Scottish Special Housing Association 1987 SLT 320, at 321E. To similar effect, albeit within a contractual context, are comments of Lord Reed in Douglas Shelf Seven Ltd v Co-operative Wholesale Society Ltd and another [2007] CSOH 53, who remarked (at para 599 of his judgment) that “[t]here are often different possible ways of rationalising restrictions on liability: lines can be drawn in terms of the scope of the obligation, or causation, or remoteness. The central problem is usually deciding where to draw the lines, rather than which conceptual route to follow.”
78 Per Judge Steven Plotkin of the Fourth Circuit, in Hoerner v ANCO Insulations Inc, 812 So 2d 45 (La 2002), at 52.
injury fall within the regime of workers’ compensation claims, a quite distinct category of law from negligence claims. There have been a number of reported cases relating to asbestos exposure falling within this regime. At the present time, Louisiana, unlike other states which have been preferred fora for asbestos plaintiffs, has not adopted any legislative measures to limit asbestos claims (for instance, by requiring a present physical injury to be shown before a claim may be raised).

The analytical treatment of asbestos related injuries provides a clear area of contrast between the two jurisdictions, even if the result achieved is broadly the same.

In Scotland, in common with England, liability for divisible, dose-related asbestos injuries (pneumoconiosis, asbestosis) proceeds from the position that causation-in-fact must be shown on a traditional ‘but for’ basis for a non-negligible portion of the injury before the party responsible for that portion may be found liable (solely and not in solidum) for such portion. In relation to indivisible asbestos related injuries (mesothelioma), liability in solidum was traditionally imposed for the totality of the injury upon all parties who caused more than a non-negligible exposure of the pursuer to asbestos. That position was briefly altered, following the decision in Barker v Corus (UK) plc (strictly only applicable in England, but likely to have been followed by the Scottish courts), such that liability was only imposed singularly (‘severally’ is the Scots term) upon each defender responsible for a non-negligible exposure to asbestos in respect of the magnitude of the chance of injury created by such exposure. This development attracted widespread criticism from asbestos victims’ groups, who successfully lobbied for legislative change to re-impose solidary liability in such cases. This was achieved under section 3 of the Compensation Act 2006, which reinstated solidary (“joint and several” in Scottish and English terms) liability in respect of the causation of asbestos related mesothelioma of the pleura. Under the legislation, defendants may continue to seek an apportionment of liability inter se, and awards may be reduced in respect of contributory negligence. Additionally, in order to protect properly insured defenders from bearing the burden of liability in cases where co-defenders may not be similarly insured and thus potentially unable to meet their liability, the statute provides for Treasury regulations creating a compensation fund from which defenders may seek a contribution in respect of the portion of total liability due by co-defenders unable to pay. These

---

79. The relevant legislation, which since 1952 has included occupational diseases like asbestosis, silicosis, dermatosis, and pneumoconiosis within its ambit, is found at La RS 23:10. It should be noted that so-called take-home claims, i.e. by the family of employees who have brought home noxious substances like asbestos into the family home, are not covered by workers’ compensation legislation. Such take-home claims have increased in popularity since 2000: for an example, see Chaisson v Avondale Industries 947 So 2d 171 (La App 2006). See further on the popularity of take-home claims, P M Hanlon and E R Geise, “Asbestos Reform - Past and future”, Mealey’s Litigation Report, vol 22, Part 5, 1-20, at 10-11.

80. See, for instance: White v Johns-Manville Sales Corp 416 So.2d 327 (La App 1982); Howard v Johns-Manville Sales Corp 420 So 2d 1190 (La App 1982); Kramer v Johns-Manville Sales Corp 459 So 2d 642, (La App 1984); Carmadelle v Johns-Manville Sales Corp 459 So 2d 621 (La App 1984); McDonald v New Orleans Private Patrol 569 So 2d 106 (La App 1990); Atkinson v Celotex Corp 633 So 2d 383, 93-924 (La. App. 1994); Adams v Asbestos Corporation Ltd 914 So 2d 1177 (La App 2005).

81. Ohio, Texas and Florida are prime examples, accounting for 35% of all US asbestos claims in the period 1998-2000. Each of these states has adopted legislation to delimit the boundaries of asbestos claims: Ohio Rev Code Ann §§ 2307.91 to 2307.98 & 2502.02; Tex Civ Prac & Rem Code Ann §§ 16.0031 & 90.001 to 90.012; Fla Stat ch 774.201 to 774.209). See, for further commentary, P M Hanlon and E R Geise, “Asbestos Reform - Past and future”, Mealey’s Litigation Report, vol 22, Part 5, 1-20. Such legislative developments were driven in part by the American Bar Association, which voted in 2003 in favour of restricting asbestos claims by unimpaired litigants (Resolution of the House of Delegates of the American Bar Association, February 2003).

82. Wardlaw v Bonnington Castings 1956 SC (HL) 26, [1956] AC 613, which in fact imposed liability in solidum on the facts of the case, a result widely thought to be an aberration in an otherwise impressive decision.


85. The Act received Royal Assent on 25 July 2006, and section 3, on liability for mesothelioma, came into force on the same day. Section 3 is given retrospective effect, although without effecting claims settled before 3 May 2006: see s16(3),(4).

86. S3(1),(2). The exposure caused by the defender must have been the result of negligence or breach of statutory duty (s3(1)(a)), and the cause of the mesosothelioma must, “because of the nature of mesothelioma and the state of medical science”, be indeterminate (s3(1)(c)).

87. S3(7). The relevant regulations are the Compensation Act 2006 (Contribution for Mesothelioma Claims) Regulations 2006, SI 2006/3259.
changes in respect of mesothelioma claims were effected without undoing the general realignment made in Barker of material increase in risk causation as lost chance recovery.

The Louisiana courts have, by contrast, used the 'substantial factor' criterion to create a single judicial response to asbestos exposure, whether the injuries sustained are divisible or indivisible. The Louisiana approach, consistent with the approach taken in other state jurisdictions, follows that taken by the US Federal Court of Appeal in Borel v Fibreboard Paper Prods Corp, in which a single approach to divisible and indivisible asbestos related injuries was taken.

The first case of asbestos related injury in Louisiana worthy of note is Quick v Murphy Oil Co, an action raised by the plaintiff in respect of his contraction of asbestosis (a divisible injury). He sued a number of parties. One such defendant argued that exposure to its asbestos containing product was minimal, such that it should not be held to have been a cause-in-fact of the plaintiff's asbestosis. The court agreed, holding that the exposure for which the defendant was responsible was minimal, and noted that the medical evidence indicated that was a “very high” probability that Quick would have developed asbestosis without the exposure in question. In other words, the exposure in question was neither a ‘but for’ cause of his injury, nor was it sufficiently serious to amount to a substantial factor in the causation of that injury.

Explaining the basis for its decision, the court in Quick held that in multiple defendant asbestos cases “courts have analyzed the cases under concurrent causation, a doctrine which ‘proceeds from the assumption that more than one defendant substantially contributed to the plaintiff’s injury.’ ” In other words, a presumption is created in multiple defendant asbestos cases, using the substantial factor concept, that, where there is concurrent exposure from more than one source of asbestos, each source is assumed to contribute to the resultant injuries. The defendant may demonstrate, however, that the exposure caused by it was not a ‘substantial factor’ in the plaintiff’s injuries, which was precisely what happened in Quick.

There is a contrast here with the result in the Scottish case Wardlaw v Bonnington Castings. In that case, where one of three noxious dust producing machines was demonstrated to have contributed only an insignificant amount of dust in comparison to the total to which the pursuer had been exposed, it was discounted as a cause of injury; whereas the other two machines, producing significant quantities of dust, were assumed to have contributed to the pursuer’s pneumoconiosis. While both cases share an assumption of causal connection in respect of two or more non de minimis concurrent causes, Quick goes further in asking the defendant to demonstrate that the concurrent causal effect for which it was responsible was not substantial. In Scotland, there is no such assumption that a concurrent cause will be substantial: it is for the pursuer to demonstrate that a cause was sufficiently ‘material’ (in the Scots terminology) to constitute a cause-in-fact of the injury.

The Louisiana courts subsequently chose to extend the Quick approach to indivisible injuries. In Egan v Kaiser Aluminum & Chemical Corp, the plaintiff contracted a mesothelioma of the pleura as a result of exposure to asbestos. He sued a former employer for whom he had worked for seventeen years (the first named defendants), as well as a number of manufacturers of asbestos-containing products to which he had been exposed during his working life. One of the defendant manufacturers, OCF, appealed against a finding of liability on the basis that the plaintiff had been exposed to its products for a maximum of one year out of his working life, and that this exposure ought not therefore to be deemed a substantial factor in the causation of his mesothelioma. Citing the Quick asbestosis decision, the Fourth Circuit dismissed OCF’s argument, holding that

Simply because the plaintiff was exposed to OCF's asbestos-containing product over a relatively short period of time, and had considerable long-term exposure to other products, it cannot be said that the exposure to Kaylo [the defendant’s product] could not have been a substantial contributing factor in his development of mesothelioma. The evidence supports a finding that his exposure to Kaylo was a substantial contributing factor in his development of the disease.

89 493 F 2d 1076, 1083 (5th Cir 1973).
90 643 So 2d 1291 (La App 1994).
91 643 So 2d 1291, at 1294, per Barry J.
92 1956 SC (HL) 266
93 677 So 2d 1027 (La App 1996).
94 677 So 2d 1027, at 1035, per Armstrong J.
This statement demonstrates the impact of an assumption of substantial causal effect, as laid out in the earlier Quick case, and shows the heavy burden which it imposes on defendants when applied in a case of an indivisible injury like mesothelioma. The court in Egan is, in effect, saying that because the defendant cannot show that its product could not have been a substantial factor in the causation of the plaintiff’s indivisible injury, it will be assumed to be such a factor. Of course there is no way that most defendants will be able to demonstrate this in cases of indivisible injury, as such injuries could have been triggered by a single unknown fibre of asbestos inhaled during a short period of exposure. The effect of the assumption that anything other than a de minimis period of exposure is a substantial factor in asbestos related cases of indivisible injury effectively ensures that any defendant who cannot show that it was responsible for only a de minimis level of exposure will be held to bear a share of the responsibility for the plaintiff’s injury. While a causal link is often also found in Scottish mesothelioma cases, the difference is that in Scotland it is for the pursuer to demonstrate which exposures were sufficiently material.

The Egan approach was more drastic in its effect in the period before the Civil Code was altered to curtail dramatically the imposition of liability in solidum.95 Prior to that date, the result achieved in Louisiana was similar to the finding of solidary liable made in Fairchild, and now entrenched in the provisions of the Compensation Act 2006.

The decision in Egan has been followed in a later decision of the Fourth Circuit in Vodanovich v A P Green Industries Inc,96 albeit the plaintiff’s claim was rejected in that case.97 Most recently of all, it status has been cemented through the approval of the Louisiana Supreme Court in its decision in Adams v Owens-Corning Fiberglas Corp.98

(3) Pleural plaques
In Gregg v Scott,99 the House of Lords rejected a claim against a doctor who was said to have negligently caused a reduction in a patient’s life expectancy, because, inter alia, such loss was not tied to any existing demonstrable injury. Courts in England and Scotland have consistently shown themselves unwilling to permit such claims for mere loss of a chance of avoiding a future personal injury.100 Such a position has created an imperative to find new categories of demonstrable existing loss on to which claimants can attach medical lost chance claims.

One such category of arguable existing injury is asymptomatic pleural plaques triggered by exposure to asbestos. Consideration of whether such pleural plaques constitute recognisable injury appears not to have received the same judicial attention in Louisiana as it has in Scotland and England. This may, in the recent past, have been because asymptomatic exposure to asbestos would have given a right to damages in Louisiana so long as the risk of developing a consequential asbestos related illness was more than merely slight. This entitlement resulted from a number of reported decisions101 taken together with a prior version of Article 2315(B) of the Civil Code. However, the text of that Article has, since a 1996 amendment, excluded liability in damages for the costs of “future medical treatment, services, surveillance, or procedures of any kind unless such treatment, services, surveillance, or procedures are directly related to a manifest physical or mental injury or disease.” This amendment has brought Louisiana law into line with Scots law, where damages may not be sought in relation to the risk of future illness unless such risk relates to a demonstrable existing physical injury. Evidently this new position raises for Louisiana, as well as for Scotland, the question of whether the presence of pleural plaques constitute existing physical injury.

95 As to which see further section F below.
96 869 So 2d 930, La App 4 Cir 2004.
97 On the basis that “the plaintiff has failed to establish any direct or circumstantial evidence of exposure to asbestos fibers released by the defendants’ activities.”
98 923 So 2d 118, La App 1 Cir 2005. A more liberal regime applies in relation to certain claims of maritime exposure to asbestos arising under a special statute, the Jones Act, the criteria of which are easier to satisfy for plaintiffs: all the plaintiff need do is prove exposure to asbestos aboard the employer’s vessel, but need not demonstrate whose asbestos he was exposed to; moreover, the plaintiff need not prove ‘substantial causation’, he is only required to prove ‘slight causation’ (in other words, the negligence of the employer must only have been a cause of injury, no matter how slight a cause). See, for an example of such a Jones Act case, Torrejon v Mobil Oil Co, 876 So 2d 877, La App 4 Cir.
In a couple of Outer House cases decided in the late 1990s, the Court of Session decided that asymptomatic pleural plaques constituted actionable damage of themselves.\textsuperscript{102} This position, however, was reached without any consideration of the arguments surrounding the question, the Court in both cases merely accepting the assumption of both sides that pleural plaques were injurious \textit{per se}. By contrast, in recent high profile English litigation, the House of Lords took the contrary view that asymptomatic pleural plaques are \textit{not} actionable damage \textit{per se},\textsuperscript{103} a view which one judge in the Outer House subsequently took to be determinative of this question in Scots Law.\textsuperscript{104} The decision of the House of Lords was entirely consistent with orthodox principles of what constitutes damage, but it produced an emotional response from the asbestos litigants’ lobby, so much so that in Scotland the governing party decided to introduce a Bill to the Scottish Parliament in June 2008 to exclude the effect of this decision and to permit claims by those suffering from pleural plaques (as well as pleural thickening and asymptomatic asbestosis) despite the lack of any symptoms.\textsuperscript{105} This development was a questionable victory for interest group lobbying of politicians over principle and precedent, and may be contrasted with recent legislative developments in those US states which have chosen to exclude claims by the ‘worried well’ who have merely been exposed to asbestos in favour of claims by those suffering demonstrable harm, in order that the limited funds of defendants are channelled to those most in need.\textsuperscript{106} The Bill singularly fails to address the question of how the quantum of damages for an asymptomatic condition like pleural plaques or pleural thickening is to be assessed, given that such conditions produce no sensation of pain or have any deleterious effect upon health.

What then is the view of Louisiana law on pleural plaques? Given the nature of pleural plaques as merely cellular change without any necessary attendant pain or suffering, one might have thought that the decision in \textit{In re Rezulin Products Liability Litigation},\textsuperscript{107} a case heard before a New York court but applying, in part, Louisiana law, would have been influential in Louisiana pleural plaque litigation. In the \textit{Rezulin} case, it was held that asymptomatic sub-cellular changes produced by ingestion of a pharmaceutical product were not actionably injurious under Louisiana law, the court stating that “there is no evidence that plaintiffs’ alleged injuries have manifested any clinically observable detriment.”\textsuperscript{108} This, taken with the fact that any future harm which might occur was merely speculative, led the court to conclude that the plaintiffs’ alleged injuries were not ‘manifest injury’ for the purposes of a claim under the Louisiana Products Liability Act. Such reasoning seems applicable to asymptomatic pleural plaques. However, it has not been the position adopted by the Louisiana courts.

To begin with, it is worth noting that an examination of the Louisiana cases in which plaintiffs have been identified as suffering from pleural plaques indicates that some of the medical evidence presented to the courts has not been entirely helpful. In \textit{Hoerner v ANCO Insulations Inc},\textsuperscript{109} for instance, the Fourth Circuit summarised the plaintiff’s medical practitioner’s evidence as being to the effect that “Mr. Hoerners’ x-rays show the presence of pleural plaques, which indicate that he has asbestosis”,\textsuperscript{110} a finding which was not criticised by the court. This is a medically erroneous statement: the presence of pleural plaques has no necessary connection with asbestosis. Many persons exposed to asbestos who develop pleural plaques never go on to develop asbestosis, and, where they do, the asbestosis is not causally connected to the presence of the pleural plaques. A similarly misleading medical statement had been made by the Fourth Circuit in the earlier case of \textit{In re Asbestos Plaintiffs v Bordelon, Inc},\textsuperscript{111} when the court described pleural thickening or pleural plaques as “tumors or cancers of the pleura.”\textsuperscript{112} This misleading terminology of disease when applied to pleural plaques will tend to

\textsuperscript{102} Nicol v Scottish Power plc 1998 SLT 822; Gibson v McAndrew Wormald [1998] SLT 562 (see in particular Lord Maclean’s comments at 563).

\textsuperscript{103} Johnston v NEI International Combustion Ltd [2007] UKHL 39.

\textsuperscript{104} See comments of Lord Uist in \textit{Wright v Stoddard International plc} [2007] CSOH 173.

\textsuperscript{105} The Damages (Asbestos-related Conditions) (Scotland) Bill. For the text of the Bill, see http://www.scottish.parliament.uk/s3/bills/12-Asbestos/b12s3-introd.pdf. See for comment on the Bill, M Hogg, “Asbestos related conditions and the idea of damage in the law of delict”, 2008 SLT (News).

\textsuperscript{106} See P M Hanlon and E R Geise, “Asbestos Reform - Past and future” (cit at n 77) at 3- 4.

\textsuperscript{107} 361 F Supp 2d 268, SDNY 2005.

\textsuperscript{108} 361 F Supp 2d 268, SDNY 2005, at 278.

\textsuperscript{109} 812 So 2d 45 (La 2002).

\textsuperscript{110} 812 So 2d 45, at 74, per Steven R Plotkin J.

\textsuperscript{111} 726 So 2d 926, La App 4 Cir, 1998.

\textsuperscript{112} 726 So 2d 926, at 938, per Jones J.
produce the view that pleural plaques are, of themselves, injurious. This has on occasion been the view adopted by juries in Louisiana litigation, although the picture is rather mixed.

In the Bordelon multi-party litigation, one plaintiff (Naquin) had been diagnosed by a physician as suffering from pleural plaques, and “pleural and pulmonary asbestosis, and hypertension”. On the other hand, another examining physician had found “no definite evidence of asbestosis, but alluded to the possibility of pleural plaques”. On the basis of this conflicting evidence, the jury concluded that Naquin was not suffering from an asbestos related disease. The Fourth Circuit did not overturn this finding, concluding that it was “not manifest error nor clearly wrong from our review of the record before us.”113 One might speculate that the jury took the view that, given the evidence least favourable to the plaintiff, the mere possibility of the presence of pleural plaques was insufficient to demonstrate actual injury, but this would indeed be mere speculation. However, in the later multi-party litigation of Abadie v. Metropolitan Life Insurance Co,114 the Fifth Circuit upheld a jury award to one plaintiff (Quave) of $12,800 in respect of asbestos exposure, the medical evidence indicating that the exposure had resulted in chronic inflammation of the left lung and a ‘possible pleural plaque’ on the same lung. In respect of another plaintiff in the same case (Robin), the Fifth Circuit upheld a jury award of $76,500 in respect of asbestos exposure diagnosed variably upon medical examination as having caused either ‘bilateral pleural plaques’ or ‘some pleural change’. The award to Robin certainly suggests that a Louisiana jury is willing to take the view that mere pleural change is sufficient to constitute manifest and actionable injury.

The use of juries to determine the injurious or otherwise nature of pleural plaques, with the consequent lack of reasons being given as to when and why manifest injury has been sustained through inhalation of asbestos, is frustrating for the jurist. The mixed picture of success before juries may in part be the result of contradictory and sometimes incorrect medical testimony. The problems of such unhelpful testimony are exacerbated by misleading judicial comments, such as that of the Fourth Circuit in Bordelon, referred to earlier, that pleural plaques are a form of ‘cancer’. If courts are to understand the contents of “the box of chocolates” which is asbestos litigation, they need to have a clearer understanding of the aetiology of the various asbestos-related medical conditions and to express this aetiology correctly to juries and in their appeal judgments.

F. CONCLUSIONS

Some conclusions may be drawn in relation to the approach of the two systems to causation in delict/tort, both by way of similarity as well as difference. Such conclusions are prefaced by reiterating that, as noted at the outset, comparison is rendered more difficult by the standard usage of jury trials to settle civil claims in Louisiana, so that we often have no stated reasons for specific outcomes being reached.

A number of parallels may be drawn between the two systems:

1. both recognise that causation-in-fact is properly to be separated from considerations affecting the scope of liability for consequences (or ‘legal’ or ‘proximate’ causation as it has traditionally been called), albeit that in Scotland continuing legal cause terminology can somewhat muddy the waters;
2. both adopt a basic sine qua non test of causation-in-fact, but have yet to develop a test (such as the academically popular NESS test) which would deal with certain complex problems of factual causation, including over-determined outcomes, which cannot be solved using the sine qua non test;
3. both suffer from continuing terminological difficulties, Louisiana with its unhelpful ‘substantial factor’ test and Scotland with its continued reliance on ‘legal cause’ terminology to describe what are essentially normative considerations. Both systems would benefit from further reflection on such terminological usage;
4. both systems would also benefit from giving deeper consideration to the factors which should be recognised as generally affecting the scope of liability for consequences. The normative, policy issues which have often influenced decisions require to be given more explicit and considered recognition; and

---

113 726 So 2d 926, at 967, per Jones J.
114 784 So 2d 46, La App 5 Cir 2001.
both might possibly, Scotland certainly, benefit from a reassessment of the general analysis of the law of delict/tort. There is continuing doubt as to the proper stage at which to consider certain matters, and how therefore certain factual situations should be analysed. Similar facts can produce different analyses in different cases, sometimes by reference to duty of care, sometimes to standard of care, and sometimes to causation. Courts tend to muddle uncertainly through, and while they may reach the right decision, it can be without much clarity of thought.

There are also however differences, both in style and approach, between the two systems:

(1) there is a greater willingness amongst the Louisiana judiciary for engaging in academic and philosophical debate about theories of delict, and of causation in particular. Scottish judges have typically eschewed such debate, although the recent upsurge in cases dealing with causal issues, itself perhaps a result of a new attitude amongst the judiciary in the last twenty or so years of engaging with rather than politely ignoring academics, may suggest that this is changing;

(2) while the Scottish (and English) courts originally developed material increase in risk analysis, and now loss of a chance, to deal with cases of causal indeterminacy, Louisiana courts have been unwilling to move beyond the limited confines of ‘substantial factor’ coupled with a scientifically questionable (albeit pro-plaintiff) unitary treatment of divisible and indivisible injuries. The Scottish analysis could prove beneficial in developing Louisiana law in this respect; and

(3) while a number of Louisiana decisions on pleural plaque liability have suffered from questionable expert medical evidence, in Scotland the difficulty has lain with a too ready willingness to treat pleural plaques as actionable harm without considering that question in any depth. Whilst the considered view of the House of Lords, following the Grieves litigation, is that pleural plaques are not actionable harm, in Scotland this decision will soon be overturned by legislative provision, a development which, it has been suggested, marks a triumph of emotionalism over principle. What the effects, if any, of these developments will be upon the Louisiana consideration of this type of remains to be seen, but they are likely to be slight, if any, as changes in asbestos policy are largely driven by jurisdiction specific concerns.

In both systems it is fair to say that one detects a degree of reticence among members of the judiciary in delving into causal issues. This may well be the result of a perception that the topic is a complex one, apt to muddy the waters of litigation. If that is indeed the case, it may be one very good reason why courts faced with causal questions might benefit from showing greater reliance on the lead given by academic discussion in the way which they have undoubtedly done in other legal fields. Such an academic-judicial partnership would be likely to assist in the development of the law in both jurisdictions in relation to the specific causal conundrums with which each continues to wrestle.