Causation: The Two Cultures

A: INTRODUCTION

A1. In 1959 the (then, rather sadly now, much less so) celebrated author CP Snow gave a lecture entitled *"The Two Cultures"*. In it he posited the theory that the whole of western civilisation could be viewed as being powered by the knowledge relating to the humanities and knowledge relating to the sciences. Building on that dichotomy he argued that what was stultifying the development of the world was that the two great areas of knowledge did not talk to each other.

A2. This paper attempts to grapple with the meaning of 'material contribution in fact' ("MCIF") as a test for causation and, in particular, how the origins, meaning and applicability of that test are understood differently by those who predominantly practice in the area of disease litigation when compared to those who do so in clinical negligence. This division of understanding between practitioners in the two areas has fuelled and exacerbated a trend which had already between present in disease litigation itself, namely to apply the rule unequally based on a minority misinterpretation of those origins and logical underpinnings. This increasing trend is reflected in a clutch of modern clinical negligence cases and the overall purpose of this paper is, in highlighting the division of approach, seek to obtain a harmonisation and to prevent these particular 'Two Cultures' from failing to speak to each other.

A3. We will therefore seek to do the following over the next twenty five minutes:

A3.1. What is the nature and purpose of MCIF?

A3.2. What is the orthodox view regarding the circumstances when it may become applicable?

A3.3. How and why did the heterodoxy arise?

A3.4. Is there a synthesis?

This can only be the most whistle-stop of tours. The application of this broad outline to 'real world' claims is the stuff of detailed advices only.

B: MCIF

B1. Whilst it is possible to identify the term 'material contribution' as being a basis of proving causation prior to this, it is clear that its first reasoned outing was in the case of *Duke of Buccleuch v Cowan (1866) 5 M 214*. The facts of that case can be simply put: The Duke owned a hitherto pristine section of the River Esk. He sued 6 mills situated upstream, each of which had, independently, introduced pollution into that river which led, in combination, to a nuisance downstream to him. The defenders individually argued that since each other manufacturer had done precisely the same thing as they, each individual could not be held responsible for degrading the river – it had already been degraded by the others and since they were not acting in concert (i.e. so as to become jointly liable in delict) there was no claim against any of them. (This was a brilliant *Fairchild* defence almost 150 years prior to that case). Brilliant: but doomed. The Court of Session rejected that case and held that it was enough that the defender had *materially contributed* to the overall degraded condition. Per Lord Neaves **@ [235]**:

> *"The charge* [i.e. to the Jury at first instance] *presupposes that there may be a certain degree of pollution or a ….concurrent pollution from two sources – as to which it may be true, though it may not be proved, that each of them would have amounted to a nuisance, but it is plainly proved that the two together amount to a nuisance and that each of them materially contributes to the joint result. ….If it be necessary to prove that the pollution by each mill would by itself amount to a nuisance, you get in the circumstances in which these parties stand, into a question of the greatest possible difficulty, and more of speculation and of conjecture than anything*

else, because you would be driven to mere matter of opinion and nothing else. You are to conjecture what would have been the effect in the case of the mills having acted by themselves and if you cannot prove that each would have amounted to a nuisance by itself, however near it might come to it- though nine-tenths of a nuisance, or 99-100ths, were made out, still if it wants a hairbreadth, and if you do not prove it to the full point, you fail in each case against all parties. Now, it appears to me that that is totally out of the question. I humbly think it was well laid down that it was not necessary to prove that conjectural fact, provided this was proved, that in the existing state of the concurrent operations of these mills, nuisance was the result and that each of them contributed a material part – which, whether proved to be a nuisance in itself or not, is a material contribution to produce a nuisance."

B2. It can be seen immediately that the hallmark of 'material contribution' was that, in order to prevent unfairness to the victim (who had undoubtedly suffered injury at the combined hands of them all) it was necessary *only* to show that each had materially contributed to that whole and it was not necessary to prove that any one of them had *individually* carried out sufficient pollution to, *individually*, amount to an actionable nuisance. Put conversely, it was the essence of 'material contribution' that liability was founded on proof not amounting to 'but for'.

B3. The *Duke's* case was not an outlier. It is actually a fascinating history to follow it being repeated in a series of Scottish nuisance cases and then, via Judgments of Scottish law lords sitting in the UK-wide (of course) House of Lords. Thus in *Wakelin v London & South Western Railway Co.* (1886) 12 App Cas 41 (a fatal accident claim brought against the defendant based on the assertion that the fact that his body was found next to their track was sufficient proof of the cause of the death and that it had arisen solely from their default) Lord Watson (a Scottish Lord of Appeal in Ordinary) stated that the applicable test for causation was that: *"…the plaintiff must allege and prove, not merely that they* [i.e. the Defendants] *were negligent, but that their negligence caused or materially contributed to the injury"* **@ [47]**).

B4. It is therefore clear that by the time we get to *Bonnington Castings v Wardlaw* (the usual starting point for any analysis) the phrase had had an unchanging meaning for nearly 100 years. However, before we go on to analyse what was said in *Bonnington* and what has been said about it afterwards, it is necessary to put those comments in context by providing a summary of the important features of *'but for.'* (This is a significant compression on the full number of principles identified by MER QC/KB and CMT in their skeleton for *Mather v MOD* – a trial in which they relied on MCIF to link exposure to organic solvent inhalation with multiple sclerosis).

B5. The principal principles:

B5.1. *Principle 1:* If the totality of the evidence in the case positively demonstrates that the disease was going to occur in any event, at the time that it did and with the same trajectory of progression in any event, even in the absence of all exposure to the alleged causative factor, then C fails (*Hotson v East Berkshire Health Authority HA* [1987] 1 AC 750). This either on a 'but for' or MCIF basis

B5.2. *Principle 2:* Whichever test is applied, if the evidence positively demonstrates that without the tortious exposure to the alleged agent, the disease or outcome would not have occurred, then C succeeds because this is tantamount to 'but for' proof and, as the gold standard, if C wins on a 'but for' basis, (s)he automatically wins on a MCIF basis

B5.3. *Principle 3: MCIF* applies in the following circumstances:

(a) There have to exist one or more cumulative causes (i.e., cumulative causes are any causes which are NOT independent of each other and would each on their own have been sufficient to cause the adverse outcome – *Wilsher v Essex Area Health Authority* [1988] 1 AC 1074).

(b) Medical or other science can prove that the tortious cause made some more than negligible contribution to the outcome but cannot determine the size of the contribution;

(c) And hence cannot say either way whether or not the material contribution amounts to 'but for' (put in the reverse, medical science simply cannot say whether or not the material contributing part was the difference between the adverse outcome happening or not. To this extent, as a test for causation, it amounts to a significant and recognised loosening of the usual 'but for' test *Barker v Corus Steel* **@ [75]:** *"The 'but for' or sine qua non test of causation gives way to this considerably more generous test based on the defendant's material contribution to the victim's injury").*

In further explanation of Principle 3 (and by way of example of proof that there may be many reasons why the causes are cumulative but where medical or other science cannot say what the degree of contribution is) MCIF will apply where:

- A single tortfeasor has exposed the victim to a single agent over time, some part of which is either non-tortious *(Bonnington Castings v Wardlaw* [1956] 1 AC 613; *Nicholson v Atlas Steel* [1957] 1 WLR 613) or otherwise non-actionable (*Clarkson v Modern Foundries* [1957] 1 WLR 1210 – in that case owing to the operation of the Limitation Act 1939); or
- One or more tortfeasors have exposed the victim to a substance the result of which is ***indivisible*** (such as cancer) *(Stokes v Nettlefold* [1968] 1 WLR 1776 **@ [1780]**, scrotal cancer); (we shall return to divisibility and indivisibility in a short while) or
- Two or more tortfeasors have exposed the victim to multiple agencies and, it is simply impossible to determine the degree of contribution (*Rahman v Arearose* [2001] QB 351)
- Or the Claimant has already a thin or crumbling skull in respect of which the tortious cause acts as an exacerbation to a degree which cannot be determined by the medics *(Smith v Leech Brain Ltd* [1962] 2 QB 405) or a 'crumbling skull' *Environment Agency v Ellis* [2008] EWCA Civ 1117 **@ [36]**; *Athey v Leonati* [1997] 1 WWR 97 **@ [103]**; and *Clerk & Lindsell* 23rd Ed **[2-173]**),
- Now, this last situation is particularly important because it is precisely how in the result, MCIF has been applied in clinical negligence cases *Bailey v MOD* [2008] EWCA Civ 883; [2009] 1 WLR 1052 CA*; Williams v Bermuda Hospitals* [2016] AC 888; and the explanation provided in *AB v MOD* [2010] EWCA Civ 1317 **@ [150]**).

> *"Similarly in Bailey , the tort (a failure of medical care) increased the claimant's physical weakness. She would have been quite weak in any event as the result of a condition she had developed naturally. No one could say how great a contribution each had made to the overall weakness save that each was material. It was the overall weakness which led to the claimant's failure to protect her airway when she vomited with the result that she inhaled her vomit and suffered a cardiac arrest and brain damage"*

B5.4. *Principle 4:* The contribution has to be more than de minimis.

B5.5. *Principle 5:* MCIF permits C to succeed in full without apportionment unless D raises apportionment and the Court can find some rational grounds for doing so *(Holtby v Brigham & Cowan* [2000] ICR 1086 **@ 1094G** [**20**]. *"*[The claimant] *will be entitled to succeed if he can prove that the defendant's tortious conduct mate a material contribution to his disability. But strictly speaking the defendant is liable only to the extent of that contribution. However if the*

point is never raised or argued by the defendant the claimant will succeed in full". (See also *Hatton v Sutherland* 2002 ICR 613 **@ [36], [39]**).

B6. It is in the last respect we begin to see the fault lines forming: if one is able to apportion, then one must have a divisible condition (i.e., one which is capable of being divided in its effect between causes or actors). But if one has a divisible injury, is it one in respect of which MCIF can apply? Jane Stapleton has put it very nicely:

Stapleton (2016) 132 LQR July Causes and Contributions:

> *"Assuming this was the aetiology involved, that is a cumulative one leading to a final divisible injury, the causal analysis should have been relatively straightforward: the defendant's breach was a but-for cause of some part of the injuries, albeit perhaps an indeterminate part. Though the language of 'material contribution to damage' is sometimes used here, this is unhelpful in so far as it may give the impression that a departure from the but-for test is being recognised in this type of case. Since the claimant had only established that the breach was a 'but-for' cause of a part of the total injury, the central question should be one of apportionment. In the modern era courts appreciate that, since divisible injuries are the sum of exacerbations from each contribution, a contributor should only be held to be a cause of that effect, a notional part of the final injury, not jointly and severally liable for the entire final condition. Courts therefore seek to apply an approach if necessary a rough and ready approach, to apportioning injury……In short, where the final condition is divisible there is no problem with establishing that a contribution is a necessary, that is but-for cause of part of that condition. <u>The only problem here is forensic and has to do with the quantum of damages</u>…"*
> (Emphasis added)

B7. The problem which has started to bedevil this area is the minority view (picked up on particularly by the clinical negligence lawyers) that the decision of *Bonnington*, taken to be the modern basis of the application of MCIF was critically reliant on the disease being considered there, namely pneumoconiosis, was one which was undoubtedly divisible ie it was a condition which got worse the more one inhaled silica dust. Whilst it is true that the House of Lords in *Bonnington* did use MCIF and that this was a decision which did involve a divisible injury, there is no evidence for, and much evidence against, the proposition that they applied MCIF <u>because</u> the disease was divisible. That further, the cases of *Holtby* (you will remember that that is the apportionment case) and of the *Atomic Veterans* in the Court of Appeal (later on in [150]) and that of *Heneghan v Manchester Dry Docks* (also in the Court of Appeal) when they state that *Bonnington's* application of MCIF was reliant on the underlying disease having been divisible are respectfully wrong.

B8. Why those assertions are wrong:

(a) They find no voice in *Bonnington* itself: there is no part of any of the five speeches in which the fact that the condition was divisible is held to be relevant to the final reliance on MCIF. Indeed suffusing the speeches is that they were not able to say to what degree the material contribution had been made from the tortious element of the total dust exposure.

(b) It was for this very reason that no apportionment was mentioned let alone attempted in *Bonnington*. There are two concomitants which fall from the fact that no apportionment was undertaken:

(i) The analogy with indivisible injury is therefore close; and

(ii) The only other explanation as to why it was not undertaken, namely because no one thought about asking for it and the Lords did not think of it themselves is absurd. This was the finding of Lord Uist when he considered matters in the Scottish case of *Wright.v Stoddard International plc [2008] RepLR 2 (Outer House)* @ [138-141]

(c) If stare decisis is to mean anything, then one must weigh the dicta within the 3 Court of Appeal cases in favour of the proposition that MCIF only applies where there is a divisible injury against the half a dozen or so dicta to the contrary in the HL/SC/PC. An example of such a dictum from the Privy Council is provided by *Williams v Bermuda Hospitals* **@ [32]**: *"In Bonnington's case there was no suggestion that the pneumoconiosis was 'divisible' meaning that the severity of the disease depended on the quantity of dust inhaled".* Further (albeit not exhaustive) examples are worth citing quickly:

Per Lord Rodger in *Barker v Corus* [2006] UKHL 20 **@** [**90**]

> *"..it is…hard – and settled law – that a defendant is held liable in solidum even though all that can be shown is that he made a material, say 5%, contribution to the Claimant's indivisible injury. That is a form of rough justice which the law has hitherto not sought to smooth, preferring instead, as a matter of policy, to place the risk of the insolvency of a wrongdoer or his insurer on the other wrongdoer and their insurers"*

Per Lord Phillips in *Sienkiewicz* **@ p.265F [90]**

> *"For reasons that I have already explained, I see no scope for the application of the "doubles the risk" test in cases where two agents have operated cumulatively and simultaneously in causing the onset of a disease. In such a case the rule in Bonnington applies. Where the disease is indivisible, such as lung cancer, a defendant who has tortiously contributed to the cause of the disease will be liable in full. Where the disease is divisible, such as asbestosis, the tortfeasor will be liable in respect of the share of the disease for which he is responsible"*

(d) This is all consistent with academic opinion approved in *Williams* itself, namely from Professor Sarah Green:

> *"It is trite law that, where possible, defendants should only be held liable for that part of the claimant's ultimate damage to which they can be causally linked…..It is equally trite that, where a defendant has been found to have caused or contributed to an indivisible injury, she will be held fully liable for it, even if there have been contributing causes"*

B9. Thus, we arrive at the following overall conclusions:

(a) MCIF is available as a method of proof where the *outcome* is indivisible – and we should be clear that *'outcome'* here can refer either to the disease process itself but also individual heads of claim which, irrespective of the disease, have themselves been held to be indivisible – such as loss of earnings.

(b) MCIF has, in strict theory, no place in divisible injuries since, if one knows the precise nature of (i) the dose response relationship between an agent and an outcome and (ii) the degree to which one tortfeasor has contributed, it is unrealistic to ask 'did the tortfeasor materially contribute to the entire injury?' rather than asking 'but for x% of dose provided by the tortfeasor would the victim has suffered x% of the injury?

(c) Having said that, as a matter of rough pragmatism, once MCIF has been used to prove causation, if the Court feels that it can apportion between causes or actors (as a second stage question) then it will do so;

(d) If not C succeeds in full: this is consistent with the policy of the law that it will not readily aid a tortfeasor who is proven to have made a contribution to the outcome but who says 'unless you can tell me the degree to which I have made a contribution, I should escape entirely'

(e) There is no rule of law to say that MCIF only applies in divisible injuries.

C: AND YET …. THERE ARE FIRST INSTANCE DICTA TO THE CONTRARY WITHIN THE CLINICAL NEGLIGENCE FIELD.

C1. We start this short section of the talk by reminding you of the 'half way house' which has been adopted in some clinical negligence cases, namely where it is declared that material contribution *is* only available in divisible injuries, but then adopt an analysis of asserting that where negligent acts follow non-negligent harm (such as a negligent failure to medically support a patient who has non-negligently induced illness), the total outcome is that of a divisible condition to which some material contribution has been made by the tortfeasor and hence MCIF can be used. In essence these are cases in which, as a result, the definition of what amounts to a divisible injury is drawn so widely, that in the event and outcome, few people who would succeed under our view of the law would fail to succeed within those cases *(Bailey; Williams v Bermuda* are examples).

C2. Further there are those clin neg cases in which the Court adopts our reasoning. One example is that of Picken J in *John v Central Manchester NHS Foundation trust* [2016] 4 WLR 54 @ **[98-99]**.

> *"98. This brings me, then, to Mr Kennedy's submission that in a case such as the present the court should engage in an apportionment exercise of the sort carried out in the Holtby case. I cannot accept that this can be right. First, I am in some doubt how this argument can work in circumstances where, as Mr Kennedy accepted during closing submissions, if the 'material contribution' test has been satisfied, then causation is made out. It seems to me that, if that is the position, then if the evidence is such that it is not possible to attribute particular damage to a specific cause, the claimant must be entitled to recover in respect of the entirety of his or her loss.*
>
> *99. Secondly and in any event, I am quite clear that apportionment is not appropriate where it is not merely difficult but is impossible to allot particular loss to a particular cause."*

C3. This short section deals with those cases in which within the clinical negligence sphere the view has been taken that MCIF is only available in divisible injury cases.

C4. *Davies v Frimley* [2021] EWHC 169 concerned failure to diagnose and thereafter to treat meningitis. The Claimant's case was that, as a result of the delay, his wife died. The claim succeeded on a 'but for' basis, and material contribution was considered (obiter). On a plain reading of the judgment, it appears that HHJ Auberbach could be saying one of three things:

(1) Since the Court was able to determine the issue of 'but for' causation on the evidence before it, no other legal doctrine can be brought to bear in the case.
(2) No legal doctrine of material contribution to harm exists; only the 'material contribution to risk' exception in Fairchild.
(3) No legal doctrine of material contribution to harm exists in the context of indivisible harm. Since the Claimant suffered an indivisible harm (death), no legal doctrine other than 'but for' causation can be brought to bear in the case.

C5. (1) is perhaps an oversimplification of the judgment. (2) is a bold proposition and one which seemingly runs contrary to several judgments in cases of clinical negligence. For example, *John v Central Manchester*, Picken J gave his clear view that clinical negligence cases need to be considered separately to industrial disease cases. As for (3), see, for example, the cases of *Bailey* and *Williams v Bermuda* and other cases where the Court accepted that the Defendant's negligence had materially contributed to an indivisible outcome.

C6. *Thorley v Sandwell & West Birmingham Hospitals NHS Trust* [2021] EWHC 2604 (QB) is another case

where the primary claim was "but for" (which failed in this instance) with a secondary claim of material contribution. The question was whether in cases of a single tortfeasor and an indivisible injury material contribution could apply. Soole J had this to say (emphasis added):

> *147. "On the face of it, the Court of Appeal decision in AB is binding authority that the test of material contribution* ***has no application to a case where (as here) there is indivisible injury and one tortfeasor****. However, given the basis on which the appeal in AB was argued and decided, I do not read the decision of the Supreme Court as an implicit endorsement of the proposition.*
>
> *148. On the basis of the cited passage, Heneghan is to the same effect; albeit a later passage might suggest that the distinction between divisible and indivisible injury was being viewed through the lens of the comparative difficulty of proof of material contribution. Thus the Bonnington test '... is to be applied where the court is satisfied on scientific evidence that the* ***exposure for which the defendant is responsible has in fact contributed to the injury****. This is readily demonstrated in the case of divisible injuries (such as silicosis and pneumoconiosis) whose* ***severity is proportionate to the amount of exposure*** *to the causative agent': [46].*
>
> *149. By contrast, the observations of the Privy Council in Williams provide* ***support for the rival contention****; in particular through the endorsement of Professor Green's statement of 'trite negligence law'; the treatment of Bonnington as a case where material contribution by a single tortfeasor was established on the basis (at least, as presented to the court) that* ***the injury of pneumoconiosis was indivisible****; and the footnote citation of Lord Phillips of Worth Matravers in Sienkiewicz. However whilst evidently highly persuasive, they are not strictly binding even if part of the ratio.*
>
> *150. As to the very detailed discussion of the law of material contribution in John (Picken J), I do not read it as dealing directly with this particular issue.*
>
> *151. This is evidently* ***a legal issue which is ripe for authoritative review****, at least in a case where it may affect the result. On the basis of strict precedent, I conclude that the reasoning of the Court of Appeal in AB and Heneghan must be followed. Accordingly* ***the claim of material contribution must fail on the basis that this modified test of causation does not apply when there is a single tortfeasor and an indivisible injury."***

D: RESOLUTION

D1. This is a fiercely complex area. We have done no more in this section than scratch the surface. The only answer to this is to decide which side of the debate are you on and then adopt the full arguments which ensue – this requires bespoke advice. But the moral of today is that for our friends in clin neg practice, they really, really need to talk to the disease lawyers.

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