Lords MacLean, Johnston & Drummond Young : Extra Division, Inner House, Court of Session. 11th June 2004.

OPINION OF THE COURT: LORD DRUMMOND YOUNG

- [1] The defenders were the management contractors appointed to carry out the construction of a new corporate headquarters for the Scottish Widows' Fund and Life Assurance Society, their employer being a company known as Edinburgh Construction Services Limited. The project was divided into a number of distinct works packages. These included works packages known as WP2010 and WP2011. By an agreement dated 14 September and 28 November 1995 the pursuers were appointed works contractors in respect of WP2011, which consisted of certain works on the superstructure of the building. The present claim relates to that works package. The pursuers had previously been appointed works contractors for WP2010. The contractual conditions that applied to WP2011 were an amended form of the Scottish Works Contract (March 1988), and were contained in an agreement between the parties dated 14 September and 28 November 1995.
- [2] The pursuers aver that they began work on WP2011 on 25 September 1995. According to the construction programme agreed between the parties, the work on WP2011 should have been completed 28 weeks later, on 7 April 1996. In fact practical completion of WP2011 was achieved after 50 weeks, on 7 September 1996. In the present action the pursuers claim that they are entitled to an extension of time of 22 weeks for completion of WP 2011, and to a revised completion date of 7 September 1996. They further seek decree ordaining the defenders to procure the ascertainment of the pursuers' loss and expense incurred in consequence of delay and disruption in the completion of the contract works, and decree ordaining the defenders to procure the final adjustment of the contract sum. Finally, they conclude for payment of £4,807,144.16. That sum is said to represent the balance due by the defenders to the pursuers after taking account of the pursuers' loss and expense in consequence of the delay and disruption and the final adjustment that is said to be necessary to the contract sum. The issues that were in dispute in the present reclaiming motion related to the calculation of the loss and expense that is alleged to have been suffered by the pursuers in consequence of delay and disruption in the completion of the contract works, that delay and disruption having been caused, it is said, by events for which the defenders were responsible.

The decision at first instance

- [3] After sundry procedure, the action proceeded to debate in the Commercial Court. The debate dealt with two main issues. First, the defenders contended that certain averments made by the pursuers about the effect of WP2010 on the completion of WP2011 were inconsistent and irrelevant, and should accordingly be excluded from probation. Those averments were to the effect that " ... due to the foregoing late information, and to restricted access to the work area owing to delay in Work Package 2010, the Pursuers were prevented from making a meaningful start until 12 February 1996, some ten weeks later than planned".
 - On that basis, the pursuers claimed an extension of time in respect of WP2011. The Lord Ordinary held that it was critical to the pursuers' case on this matter that none of the causes of delay to WP2011 was attributable to their fault. The pursuers had been granted an extension of time in respect of WP2010, but the delay in completion of WP2010 that had an impact on the start of WP2011 included a period after that extension. Consequently the pursuers' averments on this matter were irrelevant. In addition, the Lord Ordinary held that an agreement that the parties had concluded itself prevented any reliance by the pursuers on delay in the completion of WP 2010 beyond the extension of time that had been granted. Nevertheless, the Lord Ordinary did not exclude the averments in question from probation, on the basis that it was artificial to withhold from the knowledge of the court one aspect of the actual circumstances that might have contributed to the occurrence of delay in WP2011 simply because that aspect did not support the pursuers' claim for an extension of time. That finding was not challenged by either party.
- [4] The second issue debated before the Lord Ordinary was the relevancy of the averments in support of the pursuers' claim for loss and expense. The contention for the defenders was that these amounted to a global claim, that is to say, a claim in which the individual causal connections between the events

giving rise to the claim and the items of loss and expense making up the claim are not specified, but the totality of the loss and expense is said to be a consequence of the totality of the events giving rise to the claim. The defenders submitted that the success of a global claim was perilled on the proposition that all of the causal factors were matters for which the defenders were legally responsible. If, therefore, one factor founded on as playing a material part in the causation of the global loss could be seen to be the responsibility of the pursuers, or at least not the responsibility of the defenders, a global claim could not be maintained. The Lord Ordinary held that the pursuers' averments of loss and expense were relevant, and the present reclaiming motion is against that part of his decision.

- The Lord Ordinary began his discussion by pointing out that the case was not concerned with whether a global claim for loss and expense may relevantly be advanced by a contractor under a construction contract. The debate had proceeded on the common ground that such a claim could in principle be made: London Borough of Merton v Stanley Hugh Leach Ltd, (1985) 32 BLR 51; Wharf Properties Ltd v Eric Cumine Associates, (1991) 52 BLR 8; John Holland Construction & Engineering Pty Ltd v Kvaerner RJ Brown Pty Ltd, (1996) 82 BLR 81. The pursuers had averred that, despite their best efforts, it was not possible to identify causal links between each cause of delay and disruption and the cost consequences thereof. On that basis, the defenders accepted that the pursuers were in principle entitled to advance a global claim. The Lord Ordinary nevertheless reserved his opinion as to whether an averment of that nature was essential to the relevancy of a global claim, what is required to prove such an averment, and what the consequences of failure to prove it might be.
- [6] The pursuers had attributed their global loss to a number of causal factors. One of these was the delaying and disruptive effect on WP2011 of delay in the completion of WP2010 during a period after the extension of time granted in respect of the latter works package. The Lord Ordinary held that delay in the completion of WP2010 after the extension was not a relevant basis for a claim for loss and expense in respect of WP2011, for the same reasons that it was not a relevant basis for an extension of time in relation to the latter works package. The defenders had also pointed to a short period when delay was said to have been caused by snow, which was also a cause that did not relevantly found a loss and expense claim.
- [7] The Lord Ordinary then went on to analyse the nature of a global claim.
 - [35] Ordinarily, in order to make a relevant claim for contractual loss and expense under a construction" contract (or a common law claim for damages) the pursuer must aver (1) the occurrence of an event for which the defender bears legal responsibility, (2) that he has suffered loss or incurred expense, and (3) that the loss or expense was caused by the event. In some circumstances, relatively commonly in the context of construction contracts, a whole series of events occur which individually would form the basis of a claim for loss and expense. These events may inter-react with each other in very complex ways, so that it becomes very difficult, if not impossible, to identify what loss and expense each event has caused. The emergence of such a difficulty does not, however, absolve the pursuer from the need to aver and prove the causal connections between the events and the loss and expense. However, if all the events are events for which the defender is legally responsible, it is unnecessary to insist on proof of which loss has been caused by each event. In such circumstances, it will suffice for the pursuer to aver and prove that he has suffered a global loss to the causation of which each of the events for which the defenders is responsible has contributed. Thus far, provided the pursuer is able to give adequate specification of the events, of the basis of the defender's responsibility for each of them, of the fact of the defender's involvement in causing his global loss, and of the method of computation of that loss, there is no difficulty in principle in permitting a claim to be advanced in that way.
 - [36] The logic of a global claim demands, however, that all the events which contribute to causing the global loss be events for which the defender is liable. If the causal events include events for which the defender bears no liability, the effect of upholding the global claim is to impose on the defender a liability which, in part, is not legally his. That is unjustified. A global claim, as such, must therefore fail if any material contribution to the causation of the global loss is made by a factor or factors for which the defender bears no legal liability ... The point has on occasion been expressed in terms of a requirement that the pursuer should not himself have been

- responsible for any factor contributing materially to the global loss, but it is in my view clearly more accurate to say that there must be no material causative factor for which the defender is not liable.
- [37] Advancing a claim for loss and expense in global form is therefore a risky enterprise. Failure to prove that a particular event for which the defender was liable played a part in causing the global loss will not have any adverse effect on the claim, provided the remaining events for which the defender was liable are proved to have caused the global loss. On the other hand, proof that an event played a material part in causing the global loss, combined with failure to prove that that event was one for which the defender was responsible, will undermine the logic of the global claim. Moreover, the defender may set out to prove that, in addition to the factors for which he is liable founded on by the pursuer, a material contribution to the causation of the global loss has been made by another factor or other factors for which he has no liability. If he succeeds in proving that, again the global claim will be undermined.
- [38] The rigour of that analysis is in my view mitigated by two considerations. The first of these is that while, in the circumstances outlined, the global claim as such will fail, it does not follow that no claim will succeed. The fact that the pursuer has been driven (or chosen) to advance a global claim because of the difficulty of relating each causative event to an individual sum of loss or expense does not mean that after evidence has been led it will remain impossible to attribute individual sums of loss or expense to individual causative events. The point is illustrated in certain of the American cases. The global claim may fail, but there may be in the evidence a sufficient basis to find causal connections between individual losses and individual events, or to make a rational apportionment of part of the global loss to the causative events for which the defender has been held responsible.
- [39] The second factor mitigating the rigour of the logic of global claims is that causation must be treated as a common sense matter ... That is particularly important, in my view, where averments are made attributing, for example, the same period of delay to more than one cause".
- [8] On the foregoing basis, the Lord Ordinary held that the pursuers' averments in support of the claim for loss and expense were relevant. Part of the delay in completion was said to be the result of concurrent causes, namely the late issue of drawings and information, the delay in completion of WP 2010 and snow. Nevertheless, how each of those concurrent causes ought to be viewed in determining whether the causes for which the defenders had no liability played a material part in causing the global loss was a matter that should be left for consideration at the conclusion of a proof before answer. In addition, it was possible that evidence properly lead at such a proof might afford a satisfactory basis for an award of some lesser sum than the full global sum. The Lord Ordinary emphasised, however, that the pursuers' global claim might still fail because a material part of the causation of the loss and expense was an event for which the defenders were not liable. He further emphasised that the evidence at a proof before answer must be properly based on the pleadings.
- [9] In our opinion the Lord Ordinary is correct both in allowing a proof before answer and in the legal analysis that led to that result. We were, however, addressed at considerable length on the law applicable to delay and disruption claims in construction contracts. It was also clear that certain of the parties' submissions were somewhat different from those considered by the Lord Ordinary; in particular, the pursuers contended that the claim was not properly to be understood as a global claim in the fullest sense, but was rather a modified total cost claim. For these reasons, we think it necessary to set out our own reasoning in detail.

Causation of loss and global claims

[10] For a loss and expense claim under a construction contract to succeed, the contractor must aver and prove three matters: first, the existence of one or more events for which the employer is responsible; secondly, the existence of loss and expense suffered by the contractor; and, thirdly, a causal link between the event or events and the loss and expense. (The present case involves a works contract concluded between a management contractor and a works contractor; in such a case the management contractor is obviously in the position of the employer and the works contractor in the position of the contractor). Normally individual causal links must be demonstrated between each of the events for which the employer is responsible and particular items of loss and expense. Frequently, however, the loss and expense results from delay and disruption caused by a number of different events, in such a

way that it is impossible to separate out the consequences of each of those events. In that event, the events for which the employer is responsible may interact with one another in such a way as to produce a cumulative effect. If, however, the contractor is able to demonstrate that all of the events on which he relies are in law the responsibility of the employer, it is not necessary for him to demonstrate causal links between individual events and particular heads of loss. In such a case, because all of the causative events are matters for which the employer is responsible, any loss and expense that is caused by those events and no others must necessarily be the responsibility of the employer. That is in essence the nature of a global claim. A common example occurs when a contractor contends that delay and disruption have resulted from a combination of the late provision of drawings and information and design changes instructed on the employer's behalf; in such a case all of the matters relied on are the legal responsibility of the employer. Where, however, it appears that a significant cause of the delay and disruption has been a matter for which the employer is not responsible, a claim presented in this manner must necessarily fail. If, for example, the loss and expense has been caused in part by bad weather, for which neither party is responsible, or by inefficient working on the part of the contractor, which is his responsibility, such a claim must fail. In each case, of course, if the claim is to fail, the matter for which the employer is not responsible in law must play a significant part in the causation of the loss and expense. In some cases it may be possible to separate out the effects of matters for which the employer is not responsible.

- The expression "global claim" has normally been used in Scotland, England and other Commonwealth countries to denote a claim calculated in the foregoing manner. In the United States the corresponding expression is "total cost claim". In the American cases before the Court of Claims, however, a further category is recognised, that of a "modified total cost claim". In the American terminology, a total cost claim involves the contractor's claiming that the whole of his additional costs in performing the contract have been the result of events for which the employer is responsible. A modified total cost claim is more restrictive, and involves the contractor's dividing up his additional costs and only claiming that certain parts of those costs are the result of events that are the employer's responsibility. This terminology has the advantage of emphasising that the technique involved in calculating a global claim need not be applied to the whole of the contractor's claim. Instead, the contractor can divide his loss and expense into discrete parts and use the global claim technique for only one, or a limited number, of such parts. In relation to the remaining parts of the loss and expense, the contractor may seek to prove causation in a conventional manner. This may be particularly useful in relation to the consequences of delay, as against disruption. The delay, by itself, will invariably have the consequence that the contractor's site establishment must be maintained for a longer period than would otherwise be the case, and frequently it has the consequence that foremen and other supervisory staff have to be engaged on the contract for longer periods. Costs of that nature can be attributed to delay alone, without regard to disruption. Moreover, because delay is calculated in terms of time alone, it is relatively straightforward to separate the effects of delay caused by matters for which the employer is responsible and the effects of delay caused by other matters. For example, delay caused by late instructions and delay caused by bad weather can be measured in a straightforward fashion, subject only to the possibility that the two causes operate concurrently; we discuss concurrent causes below at paragraphs [15] - [19].
- [12] Perhaps the most detailed description of total cost claims is found in John Holland Construction & Engineering Pty Ltd v Kvaerner RJ Brown Pty Ltd, supra, a decision of the Supreme Court of Victoria. In that case, Byrne J. stated (at 82 BLR 85-87): "The claim as pleaded ... is a global claim, that is, the claimant does not seek to attribute any specific loss to a specific breach of contract, but is content to allege a composite loss as a result of all of the breaches alleged, or presumably as a result of such breaches as are ultimately proved. Such claim has been held to be permissible in the case where it is impractical to disentangle that part of the loss which is attributable to each head of claim, and this situation has not been brought about by delay or other conduct of the claimant ...

Further, this global claim is in fact a total cost claim. In its simplest manifestation a contractor, as the maker of such claim, alleges against a proprietor a number of breaches of contract and quantifies its global loss as the actual cost of the work less the expected cost. The logic of such a claim is this:

- (a) the contractor might reasonably have expected to perform the work for a particular sum, usually the contract vrice:
- (b) the proprietor committed breaches of contract;
- (c) the actual reasonable cost of the work was a sum greater than the expected cost.

The logical consequence implicit in this is that the proprietor's breaches caused that extra cost or cost overrun. This implication is valid only so long as, and to the extent that, the three propositions are proved and a further unstated one is accepted: the proprietor's breaches represent the only causally significant factor responsible for the difference between the expected cost and the actual cost. In such a case the causal nexus is inferred rather than demonstrated ... The understated assumption underlying the inference may be further analysed. What is involved here is two things: first, the breaches of contract caused some extra cost; secondly, the contractor's cost overrun is this extra cost. The first aspect will often cause little difficulty but it should not, for this reason, be ignored ... It is the second aspect of the understated assumption, however, which is likely to cause the more obvious problem because it involves an allegation that the breaches of contract were the material cause of all of the contractor's cost overrun. This involves an assertion that, given that the breaches of contract caused some extra cost, they must have caused the whole of the extra cost because no other relevant cause was responsible for any part of it".

Byrne J. went on to consider the claim made by the plaintiffs in the case before him, and pointed out that , because it was a total cost claim, it was necessary to eliminate any causes of inadequacy in the tender price other than matters for which the employer was responsible. It was also necessary to eliminate any causes of overrun in the construction cost other than matters for which the employer was responsible.

- [13] In *Boyajian v United States*, 423 F 2d 1231 (1970), the Court of Claims approved of the following passage commenting on the total cost method of calculation (at 1243): "This theory has never been favoured by the court and has been tolerated only when no other mode was available and when the reliability of the supporting evidence was fully substantiated ... The acceptability of the method hinges on proof that (1) the nature of the particular losses make it impossible or highly impracticable to determine them with a reasonable degree of accuracy; (2) the plaintiff's bid or estimate was realistic; (3) its actual costs were reasonable; and (4) it was not responsible for the added expenses".
 - In that case it was held that any suggestion that there was a presumption that the contractor's expenditure was reasonable must be rejected.
- We agree with the foregoing statements of the law by Byrne J. and the Court of Claims. It is accordingly clear that if a global claim is to succeed, whether it is a total cost claim or not, the contractor must eliminate from the causes of his loss and expense all matters that are not the responsibility of the employer. This requirement is, however, mitigated by the considerations discussed by the Lord Ordinary at paragraphs [38] and [39] of his opinion. In the first place, it may be possible to identify a causal link between particular events for which the employer is responsible and individual items of loss. On occasion that may be possible where it can be established that a group of events for which the employer is responsible are causally linked with a group of heads of loss, provided that the loss has no other significant cause. In determining what is a significant cause, the "dominant cause" approach described in the following paragraph is of relevance. Determining a causal link between particular events and particular heads of loss may be of particular importance where the loss results from mere delay, as against disruption; in cases of mere delay such losses as the need to maintain the site establishment for an extended time can often readily be attributed to particular events, such as the late provision of information or design changes. We note that in the United States the Court of Claims has approved of an approach along the foregoing lines. In Boyajian v United States, the Court of Claims approved of the following passage (at 423 F 2d 1244): "In situations where the court has rejected the 'total cost' method of proving damages, but where the record nevertheless contained reasonably satisfactory evidence of what the damages are, computed on an acceptable basis, the court has adopted such other evidence ...; or where such other evidence, although not satisfactory in and of itself upon which to base a judgment, has nevertheless been considered at least sufficient upon which to predicate a 'jury verdict' award, it

has rendered a judgment based on such a verdict.... However, where the record is blank with respect to any such other alternative evidence, the court has been obliged to dismiss the claim for failure of damage proof, regardless of the merits".

- In the second place, the question of causation must be treated by "the application of common sense to the [15] logical principles of causation": John Holland Construction & Engineering Pty Ltd v Kvaerner RJ Brown Pty Ltd, supra, at 82 BLR 84I per Byrne J.; Alexander v Cambridge Credit Corporation Ltd, (1987) 9 NSWLR 310; Leyland Shipping Company Ltd v Norwich Union Fire Insurance Society Ltd, [1918] AC 350, at 362 per Lord Dunedin. In this connection, it is frequently possible to say that an item of loss has been caused by a particular event notwithstanding that other events played a part in its occurrence. In such cases, if an event or events for which the employer is responsible can be described as the dominant cause of an item of loss, that will be sufficient to establish liability, notwithstanding the existence of other causes that are to some degree at least concurrent. That test is similar to that adopted by the House of Lords in Leyland Shipping Company Ltd v Norwich Union Fire Insurance Society Ltd, supra, where a ship was torpedoed by a German submarine and taken into the harbour of le Havre. When a gale sprang up she was moved to a berth inside the outer breakwater, where she took the ground at each ebb tide. Ultimately her bulkheads gave way and she sank. She was insured against perils of the sea, but excluding the consequences of hostilities. It was held that the proximate cause of the loss was the damage inflicted by the torpedo, which fell within the exclusion. In our opinion the same approach should be taken to cases such as the present. If an item of loss results from concurrent causes, and one of those causes can be identified as the proximate or dominant cause of the loss, it will be treated as the operative cause, and the person responsible for it will be responsible for the loss.
- In the third place, even if it cannot be said that events for which the employer is responsible are the [16] dominant cause of the loss, it may be possible to apportion the loss between the causes for which the employer is responsible and other causes. In such a case it is obviously necessary that the event or events for which the employer is responsible should be a material cause of the loss. Provided that condition is met, however, we are of opinion that apportionment of loss between the different causes is possible in an appropriate case. Such a procedure may be appropriate in a case where the causes of the loss are truly concurrent, in the sense that both operate together at the same time to produce a single consequence. For example, work on a construction project might be held up for a period owing to the late provision of information by the architect, but during that period bad weather might have prevented work for part of the time. In such a case responsibility for the loss can be apportioned between the two causes, according to their relative significance. Where the consequence is delay as against disruption, that can be done fairly readily on the basis of the time during which each of the causes was operative. During the period when both operated, we are of opinion that each should normally be treated as contributing to the loss, with the result that the employer is responsible for only part of the delay during that period. Unless there are special reasons to the contrary, responsibility during that period should probably be divided on an equal basis, at least where the concurrent cause is not the contractor's responsibility. Where it is his responsibility, however, it may be appropriate to deny him any recovery for the period of delay during which he is in default.
- [17] Apportionment in this way, on a time basis, is relatively straightforward in cases that involve only delay. Where disruption to the contractor's work is involved, matters become more complex. Nevertheless, we are of opinion that apportionment will frequently be possible in such cases, according to the relative importance of the various causative events in producing the loss. Whether it is possible will clearly depend on the assessment made by the judge or arbiter, who must of course approach it on a wholly objective basis. It may be said that such an approach produces a somewhat rough and ready result. This procedure does not, however, seem to us to be fundamentally different in nature from that used in relation to contributory negligence or contribution among joint wrongdoers. Moreover, the alternative to such an approach is the strict view that, if a contractor sustains a loss caused partly by events for which the employer is responsible and partly by other events, he cannot recover anything because he cannot demonstrate that the whole of the loss is the responsibility of the employer. That would deny him a remedy even if the conduct of the employer or

the architect is plainly culpable, as where an architect fails to produce instructions despite repeated requests and indications that work is being delayed. It seems to us that in such cases the contractor should be able to recover for part of his loss and expense, and we are not persuaded that the practical difficulties of carrying out the exercise should prevent him from doing so.

[18] An apportionment procedure of this nature has been used with apparent success in the United States in cases before the Court of Claims. Thus in *Lichter* v *Mellon-Stuart Company*, 305 F 2d 216 (1962), the plaintiffs' total cost claim on one contract was rejected on the ground that a substantial amount of their loss was the consequence of factors other than breaches of contract by the defendants. The court could find no basis for allocation of the plaintiff's claim, which was for a lump sum, between those causes which were actionable and those which were not, with the result that the entire claim was rejected. Nevertheless, the Court of Claims allowed a claim based on another contract between the same parties to succeed in part, and its decision was upheld by the United States Court of Appeals for the Third Circuit. The Court of Claims had held that part of the plaintiff's extra cost on this contract was attributable to the fault of the defendant and part was attributable to other non-compensable factors. The Court of Appeals stated the result of that finding as follows (at 305 F 2d 221):

"Once it had thus been established that only part of the ... claim represented extra cost chargeable to Mellon, the one question remaining was whether a reasonable allocation of part of the total sum was possible. The court undertook such an allocation, guided by evidence concerning the extra time required for the performance of the stone contract as the result of the improper shelf angles. We cannot say that this was an arbitrary method of allocation. Indeed, [the plaintiff] is not in position to complain that the allocation was imprecise since it bore the burden of proving how much of the extra cost resulted from Mellon's improper conduct. [The plaintiff] risked the loss of its entire claim, as occurred with reference to the masonry contract, if the court should not have been able to make a reasonable allocation".

The important points that emerge from this decision are, first, that the Federal courts in the United States are willing to undertake an apportionment exercise and, secondly, that any such apportionment must be based on the evidence and carried out on a basis that is reasonable in all the circumstances. In our opinion a similar procedure should be available in Scots law. We stress, however, that the allocation must be based on the evidence, and that under Scottish procedure the evidence must be based on a foundation in the pleadings.

- [19] In *Phillips Construction Co Inc* v *United States*, 394 F 2d 834 (1968), the plaintiff undertook the construction of a large housing project connected with an air force base. During construction, heavy rainfall and extensive flooding were encountered. Under the parties' contract, the plaintiff assumed the risks incident to abnormal rainfall as such. Nevertheless, it claimed that its difficulties were greatly compounded by the inadequacy of the government-designed drainage system for the project, and it sued for the loss that it said resulted from the defective drainage system. The Armed Services Board of Contract Appeals, the body charged with determining the dispute at first instance, rejected a total cost claim by the plaintiff, because the plaintiff's total loss was caused partly by matters for which the government were responsible and partly by the exceptional rainfall, for which neither party was responsible. Nevertheless, the Board agreed with the plaintiff's contention about the inadequacy of the drainage system, and apportioned the plaintiff's additional costs between flooding caused by defective drainage and other factors. That exercise was upheld by the Court of Claims, which observed that "It represented the best judgment of the fact trier on the record before it, and this 'is all that the parties have any right to expect'". In our opinion a broadly similar apportionment exercise is possible in a Scottish case, for the reasons discussed above.
- [20] The present case is concerned with the relevancy of the pursuers' pleadings, and the argument for the defenders in large measure consisted of a detailed and sustained attack on the overall structure of those pleadings. Nevertheless, it must be borne in mind that the present case involves a commercial action, and in the Commercial Court elaborate pleading is unnecessary. All that is required is that a party's averments should satisfy the fundamental requirements of any pleadings, namely that they should give fair notice to the other party of the facts that are relied on, together with the general structure of the

legal consequences that are said to follow from those facts. In doing that, the pleadings of one party should disclose sufficient to enable the other party to prepare its own case and to enable the parties and the court to determine the issues that are actually in dispute. The relevancy of pleadings must always be tested against these fundamental requirements. In a case involving the causal links that may exist between events having contractual significance and losses suffered by the pursuer, it is obviously necessary that the events relied on should be set out comprehensively. It is also essential that the heads of loss should be set out comprehensively, although that can often best be achieved by a schedule that is separate from the pleadings themselves. So far as the causal links are concerned,, however, there will usually be no need to do more than set out the general proposition that such links exist. Causation is largely a matter of inference, and each side in practice will put forward its own contentions as to what the appropriate inferences are. In commercial cases, at least, it is normal for those contentions to be based on expert reports, which should be lodged in process at a relatively early stage in the action. In these circumstances there is relatively little scope for one side to be taken by surprise at proof, and it will not normally be difficult for a defender to take a sufficiently definite view of causation to lodge a tender, if that is thought appropriate. What is not necessary is that averments of causation should be over-elaborate, covering every possible combination of contractual events that might exist and the loss or losses that might be said to follow from such events.

The pursuers' pleadings

- [21] It is now necessary to examine the pursuers' pleadings against the foregoing background. The pursuers aver that the completion of WP2011 took 50 weeks, involving a delay of 22 weeks. That delay, it is said, was caused by Relevant Events within the meaning of clause 2.10 of the Works Contract Conditions. Clause 2.10 defines Relevant Events, so far as they are material, as follows:
 - "(5) compliance by the Management Contractor with Instructions (which shall be deemed to include compliance by the Works Contractor with Instructions) ...
 - (6) the Management Contractor, or the Works Contractor through the Management Contractor, not having received in due time necessary Instructions, drawings, details or levels from the Professional Team ...
 - (7.1) delay on the part of other Works Contractors in respect of the Project which the Works Contractor has taken all practicable steps to avoid or reduce".

The pursuers then aver that the delay was caused by their compliance with instructions, by their not receiving in due time necessary instructions, drawings, details and levels duly requested from the Professional Team, and by delay on the part of the Works Contractors responsible for WP2010 (the latter being the pursuers).

- [22] More specifically, the pursuers' averments are as follows. The parties agreed that the construction of Block A was critical for the completion of WP2011. Work on Block A was due to start in the week of 27 November 1995. Owing to the late issue of construction drawings and reinforcement information, all the reinforcement could not be ordered until 16 January 1996. The pursuers were able to make a limited start on 15 January 1996, but due to the late information referred to above, and to restricted access to the work area owing to delay in WP2010, the pursuers were prevented from making a meaningful start until 12 February 1996, 10 weeks later than planned. The pursuers are not, they say, liable for any delay, loss or expense caused by the delay in WP2010 prior to 22 January 1996. Both before and after that date the pursuers were in any event delayed by the late issue of drawings and information.
- The completion of Block A was further delayed beyond the initial 10 weeks. The pursuers' claim in respect of such delay relates to a period of 154 days (22 weeks). That delay is identified as delay a5 in an application for an extension of time dated 12 September 1996, which is No 7/13 of process. It is clear from the latter document (table of delays to progress, Block A, sheet 6, found at page 118 of the document) that the period of delay to which the pursuers' claim relates is the period of 22 weeks running from 15 January 1996 to 16 June 1996. That table also makes it clear that the 22 weeks delay is attributable to the delays a3 and a5 mentioned in No 7/13 of process; those delays are identified at pages 39 and 40 of the document. The pursuers' pleadings then set out in some detail (reclaiming print, pp 10-12, and No 7/13 of process, pp 26 and 27) the design changes that are said to have been

made to Block A and the items of the information that are said to have been issued late in relation to that block, together with the consequences that the design changes and late information had for the method of construction. The result of the relevant design changes and late information is said to be that subsequent work was delayed by 20 weeks. Two further sources of delay are averred. First, it is said that the late issue of builderswork information relating to cores and additional work instructed for the cores caused a delay of 11 days to the completion of WP2011. Secondly, it is said that, after completion of all other works, the pursuers were instructed to build additional wellvoids at high level in core A1 and in the north-west corner of Block A. That additional work is said to have delayed completion by three days. The result was that completion of the works package was delayed by a total of 154 days, or 22 weeks, as a result of the specified causes, none of which, it is said, was attributable to the fault of the pursuers. Counsel for the pursuers stated that the whole delay of 154 days was attributed by the pursuers to the causes that we have summarized in this paragraph and the preceding paragraph, and that those were principally the delays referred to as a5 in number 7/13 of process. He further stated that there was no reference in the passages in the pleadings that he relied on to delays consequent upon WP2010. We consider that those submissions are justified.

- The pursuers' pleadings incorporate two other documents in addition to number 7/13 of process. [24] These are appended at Schedules B and C to the summons, and purport to summarize the delays that led to an extension of time claim of 22 weeks and affected contract completion. In these documents, in particular Schedule B, the delay in completion of WP2011 seems to be attributed to a number of factors that do not form part of the case summarized in paragraphs [22] and [23] above. In particular, Schedule B appears to attribute parts of the delay on WP2011 to delay in completing WP2010, and also to the effects of bad weather, in particular a heavy snowfall that made it impossible to work for seven days following 5 February 1996. In their submissions counsel for the defenders made much of these schedules; they submitted, in particular, that it must be concluded from these schedules that the delay and disruption for which the pursuers claim to recover their loss and expense did not result solely from the defenders' activities, but also resulted from matters for which the pursuers were responsible (as works contractors for WP2010) or for which neither party was responsible. Counsel for the pursuers, however, indicated that the pursuers no longer sought to rely on those schedules. We accept that that is the proper interpretation of the pursuers' pleadings. It is noticeable that the matters summarized in paragraphs [22] and [23] above are set out at some length in the pleadings, and also in number 7/13 of process. Schedules B and C, by contrast, are in summary form, and are simply incorporated into the pleadings. In these circumstances it is appropriate to treat the averments contained in the pleadings themselves at the pursuers' primary case, and the schedules as merely secondary; in the event of a conflict the primary case should prevail. We should comment, however, that it is unfortunate that Schedules B and C were ever relied on by the pursuers; at best, they would have added nothing to a case that is otherwise adequately pled, and in the event they added unnecessary confusion into the case.
- [25] The pursuers go on to make averments about the causation of loss and expense. They aver, first, that it is not possible to identify causative links between each cause of delay and disruption and the cost consequence thereof. Such an averment is normally essential to enable a pursuer to present its claim on a global basis. The pursuers go on to aver that the effect of the late issue of information was concurrent with, and superimposed upon, variations in the scope and detail of the construction. In these circumstances, they say, although it is not possible to show direct cause and effect, the pursuers have analyzed labour costs in a manner that is specified in the pleadings. That analysis may be summarized as follows. The pursuers aver that they have compared labour productivity actually achieved by them on site when work was largely free from disruption (referred to as "normal" work) with labour productivity achieved when work was disrupted (referred to as "disrupted" work). This analysis had measured productivity over several weeks during the contract, thus smoothing out productivity fluctuations. "Normal" productivity levels were derived for the construction of the principal parts of the works by an examination and analysis of selected areas of work where there was little disruption. Since these "normal" productivity levels were derived from actual production which the pursuers achieved in practice, the pursuers aver that they contain a reasonable allowance for any

disruption for which the pursuers were responsible. Those "normal" productivity levels were then applied throughout the works as detailed at the time of the contract award to establish an estimate of the "Contract Work Content" (expressed in man hours) as contemplated at the start of the works. The pursuers then compared the "Contract Work Content" with the total man hours actually expended. The difference between the two totals comprised (a) the labour element in additional and varied works (which had been partly compensated for through the Variation Account); (b) the labour element in other compensation agreed elsewhere; and (c) disruption as a result of matters for which the Employer is liable (for which compensation is sought). This method of analysis (i) is independent of the provision made in the tender, and also of contract programmes, so that it avoids difficulties of tender pricing or programme optimism; (ii) makes a reasonable allowance for disruption for which the pursuers are liable in "normal" work, by taking productivity achieved in practice rather than assumed in tender; and (iii) is unrelated to the Earned Value Analysis criticized by the defenders.

- [26] The pursuers go on to aver that the quantification and evaluation of recoverable costs arising from uneconomic working comprises the following elements:
 - (A) Establishment of "normal" levels of productivity for each core type, composite slabs, in-situ slabs, walls and other works by a analysis of selected representative areas where disruption was at a relatively low level, and extrapolation to the whole works. This was derived from an analysis of the daily labour allocation sheets for the works in a manner that is then specified in detail by reference to cores, composite slabs, in-situ slabs, walls and drainage. The conclusion of this analysis is that the total Contract Work Content reasonably required to complete the whole works as detailed at the time of the contract was 188,792 man hours.
 - (B) Comparison of the Contract Work Content with the total labour actually expended (in man hours). The total labour actually expended by the pursuers in WP2011 as disclosed by the labour sheets amounted to 373,283 man hours. The additional productive effort by the pursuers was therefore 184,491 man hours.
 - (C) Analysis of the difference, identification of the additional man hours the cost of which is admissible for recovery, and evaluation.
- [27] The pursuers accept that they are only entitled to recover additional costs that have arisen as a result of disruption attributable to the Employer. They aver that they have therefore identified and deleted those parts of the additional productive effort which relate to additional and varied works and the additional resources for a tidy-up gang and a gate gang included in the agreed weekly sum of £75,000 in respect of prolongation costs. In this way, double counting was avoided. The pursuers aver that, within the additional and varied works, the man hours included in the awards already agreed between the parties amount to 31,146 production-related man hours, and 13,556 time-related man hours. 13,068 man hours were attributable to a gate gang and a tidy-up gang over 22 weeks. The use of actual productivity levels as the basis for the "normal" work productivity allows, the pursuers aver, for any inefficiencies on their part. The remaining disruption attributable to the Employer is therefore averred to be 184,491 (31,146 + 13,556 + 13,068) = 126,721 man hours. An average labour cost of £8 per hour is applied to this figure, bringing out a total claim for uneconomic use of labour of £1,013,768.
- [28] Apart from the matters discussed in the last paragraph, the pursuers make a number of specific claims arising out of the need for named individuals to attend on site during an extended period. These claims are based on delay rather than disruption, and are distinct from the claim for uneconomic use of labour. The pursuers further claim overheads and finance costs amounting to £205,125.90 and £1,289,728. The calculation of those sums is set out in a schedule. Once again, this matter is distinct from the uneconomic use of labour, although both overheads and finance costs are partly based on the additional labour costs. The Lord Ordinary, in a part of his opinion that is not challenged (paragraph [50]), ordered the pursuers to provide additional specification of their claim for overheads, which serves to emphasize the distinct nature of the claim. Finally, the pursuers have a further claim based on delay (reclaiming print, pages 51-52) in respect of their weekly costs of running the site. This claim is based on a figure that is said to have been agreed between the parties as the cost per week of the site establishment. It is again clear that this is a matter wholly distinct from the uneconomic use of labour.

- [29] We are of opinion that, on a proper analysis, the foregoing method of calculation of the pursuers' claim is relevantly pled. The claim for uneconomic labour costs as summarized in paragraphs [22], [23], [25] and [26] above is not a global claim in the sense of a total cost claim. It does not involve a comparison of the contractor's total actual costs with its tender estimate for the same works. In the first place, it is confined to uneconomic labour costs, and in fact excludes certain labour costs that can be calculated on the basis of delay rather than disruption (the salary costs of the persons mentioned in paragraph [27]). It also excludes the additional costs of the pursuers' site establishment resulting from the 22 week delay, and overheads and finance costs. In the second place, actual labour costs in respect of the 22 week overrun in respect of Block A are not compared with the tender estimate. Instead they are compared with actual labour costs incurred on parts of the contract that were not, it is said, subject to any disruption. This goes some way towards dealing with the matters set out in the passage from *Boyajian v United States*, *supra*, quoted at paragraph [13] above, in particular the need for the contractor to show that its tender price was realistic.
- [30] The pursuers must nevertheless establish that their actual labour costs were reasonable, but we consider that that is a matter that can only be determined at proof, when consideration can be given to what actually happened during the 22 week period. The pursuers must also demonstrate that neither they nor factors outwith the control of either party were responsible for any of the causes of the increased labour costs during the relevant 22 week period. Their averments are compatible with that proposition, however. As explained above in paragraph [23], the pursuers contend that the only causes of the delay and disruption arising during the 22 week period were late instructions and variations, which are both matters for which the employer is normally responsible. Whether those averments are justified is, of course, a matter for proof. Finally, the pursuers must also establish that it is impossible or highly impracticable to determine the actual additional labour costs arising out of each variation or late instruction; that is the averment referred to at the start of paragraph [25] above. Once again, however, we are of opinion that it is impossible to determine this issue without proof.
- [31] We are accordingly of opinion that the pursuers' averments should proceed to a proof before answer. In the course of such proof, it may emerge that the causation of the pursuers' additional labour costs is not as simple as that averred; other concurrent causes may be operative. In that event, the principles discussed above at paragraphs [14] [19] may be relevant. First, the pursuers may be able to identify elements of their loss and expense that can be attributed to individual variations or instances of late instructions, or to specific groups of such variations and late instructions. Secondly, even if other causes, such as bad weather or a degree of inefficiency on the pursuers' part are operative, it may be possible to say that the variations and late instructions are the dominant cause of the pursuers' increased labour costs. Thirdly, even if matters for which the defenders are solely responsible cannot be said to be the dominant cause of the pursuers' increased labour costs, it may be possible to use a process of apportionment to divide the pursuers' increased costs between the two sets of causes. In every case, of course, adequate notice must be given in the pursuers' pleadings, but that adequacy should in our opinion be tested against the criteria set out in paragraph [20] above.

Conclusion

[32] For the foregoing reasons we are of opinion that the Lord Ordinary's decision was correct. We will accordingly refuse the reclaiming motion.

Act: McNeill, Q.C., Smith; MacRoberts (Pursuers and Respondents) Alt: Howie, Q.C., Borland; Masons, Glasgow (Defenders and Reclaimers)