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The Complex Structure Theory Revisited

The reassessment, by the House of Lords in *Murphy v Brentwood District Council*,[1] of the law of negligence relating to defective premises is generally well understood. If a carelessly constructed building causes damage to persons or property other than the building itself, an action in negligence can be brought against the builder under the principles in *Donoghue v Stevenson*.[2] Where the defects are discovered before such damage occurs, then the cost of rectification is pure economic loss. Such loss is only actionable in contract or, where a special relationship of proximity can be established, in the tort of negligent misstatement.

Despite its apparent simplicity, this reassessment leaves a number of matters unresolved. This article considers one such matter, the nature of 'other property' in the context of a building constructed by a number of different sub-contractors.

Lord Bridge touched on this problem at pages 478 and 479 of his speech in *Murphy v Brentwood*. He rejected as unrealistic and artificial an extreme version of the complex structure theory whereby an action in negligence could be maintained against a builder by regarding the various parts of the building constructed by it as different items of property capable of damaging each other. He continued:

'A critical distinction must be drawn here between some part of a complex structure which is said to be a "danger" only because it does not perform its proper function in sustaining the other parts and some distinct item incorporated in the structure which positively malfunctions so as to inflict positive damage on the structure in which it is incorporated. Thus, if a defective central heating boiler explodes and damages a house or a defective electrical installation malfunctions and sets the house on fire, I see no reason to doubt that the owner of the house, if he can prove that the damage was due to the negligence of the boiler manufacturer in the one case or the electrical contractor on the other, can recover damages in tort on *Donoghue v Stevenson* [1932] AC 562 principles. But the position in law is entirely different where, by reason of the inadequacy of the foundations of the building to support the weight of the superstructure, differential settlement and consequent cracking occurs. Here, once the first cracks appear, the structure as a whole is seen to be defective and the nature of the defect is known. Even if, contrary to my view, the initial damage could be regarded as damage to other property caused by a

[1] [1991] 1 AC 398.
[2] [1932] AC 562.

latent defect, once the defect is known the situation of the building owner is analogous to that of the car owner who discovers that the car has faulty brakes. He may have a house which, until repairs are effected, is unfit for habitation, but ... the building no longer represents a source of danger and as it deteriorates will only damage itself.'

Similar reasoning can be found at page 470 of Lord Keith's speech and at page 497 where Lord Jauncey states:

'It seems to me that the only context for the complex structure theory in the case of a building would be where one integral component of the structure was built by a separate contractor and where a defect in such a component had caused damage to other parts of the structure, e.g. a steel frame erected by a specialist contractor which failed to give adequate support to floors or walls. Defects in such ancillary equipment as central heating boilers or electrical installations would be subject to the normal *Donoghue v Stevenson* principle if such defects gave rise to damage to other parts of the building.'

It is clear from these passages that there remains some life in the complex structure theory where an action in tort is brought, not against the contractor responsible for the building as a whole, but against a sub-contractor responsible for defects in that building. But, before the various parts of a building can be regarded as different items of property so that damage to one due to defects in another can give rise to an action in negligence against that sub-contractor, two requirements must be satisfied. First, it must be established that the supplier of the defective part of the building was not also the supplier of the damaged part of the building. Secondly, the defective part must be distinct, an integral component or ancillary equipment within the building - a requirement which, at least for Lord Bridge, seems to be linked to a requirement that the damage caused to the other parts of the building is, in some way, catastrophic.

Lord Bridge illustrates the relationship between the supply test and the component test by contrasting a case where defects in the electrical installation cause fire damage to a house, and a case where foundations do not perform properly and cause differential settlement and cracking in the superstructure. He regards the latter case as an example of a defect in quality as, in his view, foundations and superstructure are indivisible. It would appear to be irrelevant whether or not the foundations and superstructure were constructed by the same contractor.

In practice, the component test is likely to prove extremely difficult to apply. On what rational basis can a steel structure be regarded as distinct from the walls and floors that it supports, if foundations are not to be regarded as distinct from the structure that they support? A distinction based on whether or not catastrophic damage has been caused is equally unworkable as a basis for determining if and when a cause of action has accrued. Hair-splitting disputes such as these all too quickly became a feature of cases in the Official Referee's corridor after the emergence of the extreme complex structure theory in *D & F Estates v Church*

Commissioners[3] and its demise in *Murphy v Brentwood*. It would be unfortunate, to say the least, if they were also to become a feature of post *Murphy v Brentwood* litigation.

One possible solution is to ignore the component test altogether and to determine the question of what constitutes other property simply by reference to the supplier test. This approach has the merit of simplicity. It does not depend on oversubtle distinctions between separate components and integral parts of a complex structure.

Furthermore, the basis for the component test that Lord Bridge sought to provide by comparing defective electrical work with defective foundations is, with respect, questionable. In seeking to contrast these two examples Lord Bridge failed to distinguish clearly between a defect and damage. In particular he suggested that the only effect that defective foundations could have on the superstructure of a house would be to create a danger to users of the property; a situation that he considered to be analogous to a car that was discovered to have defective brakes before it caused an accident.

Where, however, the person responsible for the defective foundations is not also the supplier of the house and, because of these defects damage is caused to other parts of the house before they are discovered, then, in principle, does not actual damage result when cracks first occur in the structure which the foundations support, the superstructure?[4] Loss is incurred in repairing the superstructure itself. It is irrelevant whether or not the house was or was not a danger to others. The true analogy is with a car which is damaged because its brakes are defective. In a claim in tort against the brake manufacturer, the actionable damage is damage to the car. Furthermore, if it is reasonable to mitigate this loss by replacing the defective foundations or brakes, for instance because damage is progressive, then there is no reason in principle why the cost of replacement should not also be recoverable in negligence.

But if the component test is jettisoned for these reasons then, as a general proposition, it can be said that those who provide work and materials or who supply goods in connection with the construction of a building owe duties in negligence to the present and future owners of that building to take reasonable care that their work does not cause physical damage to other parts of the building.

Given the possible consequences of this formulation of the law of negligence for the construction industry, it is hardly surprising that their Lordships in *Murphy v Brentwood* were reluctant to give unqualified support for the use of the supplier test to determine what is other property within a complex structure.

In contract the parties are free to agree the nature and quality of the work and materials or goods to be supplied for use in a building, whether by reference to price, description or intended use. Furthermore, they are

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[3] [1989] AC 177.
[4] See *Nitrigin Eirennan v Inco Alloys* [1992] 1 WLR 498.

generally free to allocate risks between themselves by appropriately-worded exclusion or limitation clauses. The imposition of liability in negligence for damage to the building into which such work and materials or goods are incorporated could all too easily short-circuit these contractual arrangements by enabling those suffering damage to achieve in the tort of negligence what they were not able to negotiate or were not prepared to pay for, whether directly or indirectly, in contract.

These issues have been widely debated and are raised whenever the law of negligence encroaches into the area of contractual relationships.[5] The component test proposed in *Murphy v Brentwood* does not, however, resolve, or even address, such difficulties. In determining what constitutes a distinct item, or an integral component within a building, the contract pursuant to which that work came to be incorporated into the building is, apparently, irrelevant.

These difficulties are more satisfactorily resolved by applying the principles in *Donoghue v Stevenson* to establish whether or not it is fair and reasonable that the supplier of a defective part of a building should owe a duty of care in negligence to a subsequent owner of that building with regard to damage to other parts of it and, if so, what standard of care should be imposed.

Reasonable foresight of kind of harm is a necessary ingredient in determining whether or not a duty of care in negligence should be imposed. In consequence, it will be difficult to establish that a subcontractor owed a higher duty of care to the owner of the building with regard to damage to it caused by defective work and materials or goods than he owed in his sub-contract under the implied terms imposed by the Sale of the Goods Act 1979 or the Supply of Goods and Services Act 1982. For example, it is difficult to see how a supplier whose principal obligation in contract was to provide goods or materials of merchantable quality could be held to have not exercised reasonable care if damage occurred to other parts of the building in which those products were incorporated, due to their use for a purpose other than that for which goods of that kind were commonly bought.

Furthermore, the manner in which such goods or materials were incorporated into the building and the surrounding circumstances, such as the supervisory duties of the client's representatives, would also be relevant in deciding whether or not they were intended to continue in the form in which they had been supplied by the sub-contractor, and whether or not there had been a possibility of intermediate inspection.[6]

As to the conflict between exclusion or limitation clauses within the contractual chain and the imposition of duties of care in negligence, again the component test is unhelpful. The approach most frequently adopted

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[5] See, for example, Lord Brandon's remarks at pages 551 and 552 in *Junior Books Limited v Veitchi Co Limited* [1983] 1 AC 520, and the discussion by Robert Goff LJ in *Leigh & Sullivan Limited v Aliakmon Shipping Co Limited* [1985] QB 350 at pages 397 and 398.

[6] *Donoghue v Stevenson*, at page 599. See also the discussion by Lloyd LJ at pages 21 to 23 and Nicholls LJ at pages 28 and 29 in *Aswan Engineering Co v Lupdine Limited* [1987] 1 WLR 1.

by the court is to consider the reasonableness or otherwise of any relevant exclusion clauses in deciding whether or not to impose a duty of care in negligence despite the allocation of risks effected by such clauses.[7]

A different objection to the imposition of tortious liability in this area concerns the extent to which negligence-based liabilities are wider than the obligations imposed by Parliament, particularly in the area of consumer protection. Such arguments found favour with their Lordships in *Murphy v Brentwood*. The fact that the Defective Premises Act 1972 only imposed obligations on those who provided work in connection with dwellings to ensure that they were habitable, and did not extend to ensure that they were free of defects, was cited as one reason for departing from *Anns v Merton London Borough Council*.[8]

As the complex structure theory being considered in this article has implications for the law of defective chattels as well as defective buildings, support for this position can also be found in the Consumer Protection Act 1987. The Act does not impose liability on the producers of defective products where the only damage was to the product that they had supplied or 'to the whole or any part of any product which has been supplied with the product in question comprised in it.[9]

In *Aswan v Lupdine*[10] Lloyd LJ considered the merits of a similar restriction of liability in the law of negligence where damage to a liquid was caused by defects in the containers in which it was supplied to the purchaser. In such circumstances could it be said that the liquid was 'other property' from the container? It was his provisional view that this would indeed be the case in the context of a claim in negligence brought against the supplier of the container.

Such a conclusion clearly follows from the supplier test. But, if so, cannot the component test be justified on the basis that it seeks to introduce into the law of tort a similar restriction of liability achieved by the words 'comprised in' as used in the Consumer Protection Act 1987? The difficulty with such an argument is that the former requirement is much narrower in scope that the latter and does not create a clear-cut distinction. Both electrical wiring and foundations are clearly comprised in a building, but on what sensible basis can it be said that only the former is a component of that building?

In any event, arguments based on the limited nature of Parliamentary intervention in this area are not persuasive. Both the Consumer Protection Act 1987 and the Defective Premises Act 1972 create a species of strict liability and, for that reason, the liabilities imposed can be regarded as justifiably narrower in scope than those imposed under the fault-based tort of negligence. Furthermore, by accepting that in certain circumstances claims in negligence can be brought against those whose

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[7] See the discussion on this matter in *Smith v Eric Bush* [1990] AC 831 and in *Norwich City Council v Harvey* [1989] 1 WLR 828.
[8] [1978] AC 728.
[9] Consumer Protection Act 1987, s 5.
[10] See n 6 *supra*.

work damages other parts of the building into which it is incorporated. the House of Lords has accepted that the tort of negligence has a wider ambit than the statutory obligations imposed under either the Consumer Protection Act 1987 or the Defective Premises Act 1972.

In conclusion it is submitted that the House of Lords in *Murphy v Brentwood* recognised that there was a place for a restricted version of the complex structure theory in the tort of negligence. The issue of what constitutes 'other property' should, however, be decided by use of the supply test alone, with the scope of the duty of care being controlled by application of the principles in *Donoghue v Stevenson* in the light of the circumstances surrounding the incorporation of the defective work into the building, including the provisions of the relevant contracts.