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Networks as a Legal Concept: Mythical Beast No More?

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I. THE LEGAL IDEA OF A NETWORK

In about 1990, several scholarly papers were published about business networks. Two famous examples had the titles 'Neither Market nor Hierarchy: Network Forms of Organisation' and 'Neither Friends nor Strangers: Informal Networks of Subcontracting in French Industry'.[1] The papers were published within the disciplines of sociology, economics and business studies. It is striking that both of those influential papers began their titles with the word 'Neither'. The scholars were clear that they were describing a new (or perhaps revived) form of business organisation. Both advanced a similar claim: the laws and practices used for coordinating productive activities not only include markets (ie contracts) and firms (ie corporations, partnerships and other kinds of business associations), but also include a new kind of business undertaking that they called a network. Unfortunately, these theorists of business structures were unable to provide a precise definition of the core features of a network and the business practices they described seemed rather diverse.[2] Adding to the confusion, the terminology of networks shortly afterwards became fashionable in many disciplines, from anthropology to neurology, as we entered what Castells called the 'Network Society'.[3]

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[1] W W Powell, 'Neither Market nor Hierarchy: Network Forms of Organisation' (1990) 12 *Research in Organisational Behaviour* 295; E H Lorenz, 'Neither Friends nor Strangers: Informal Networks of Subcontracting in French Industry' in D Gambetta (ed), *Trust: Making and Breaking of Cooperative Relations* (Oxford, Blackwell, 1989) 194.

[2] The term 'network' has been applied, for instance, to industrial districts and science parks, but although networks in the more precise sense may flourish in such contexts, those locations are not in themselves networks for the purpose of legal analysis.

[3] M Castells, *The Rise of the Network Society* (Oxford, Blackwell, 2000).

In the context of studies of the organisation of businesses, the term 'network' gradually assumed a relatively precise meaning.[4] Network forms of business organisation were not contained in a single company or a group of companies with common ownership and control. A network comprises independently owned businesses that contract with each other at arm's length. There might be direct contracts between all the parties to a network, but often some business relationships within the network would rely on custom, practice and mutual dependence rather than any formal agreement. Yet these independent businesses within the network typically work together so closely that their relationship is very similar to an integrated business organisation or firm. All parties expect to cooperate closely and be loyal to the business relationships within the network and to the commercial purpose of the network.[5] The contracts within a network are closely connected in the sense that together they function interdependently to produce a business outcome such as a product or a service. The coordination between the performance of each contract is close, so that the functioning of these contracts resembles in some ways the types of command and control exercised by managers within a single integrated corporate entity, but the businesses and participants in the network remain separate legal entities that are free to act independently in their own interests by performing or breaking their contracts, as they decide. Two common instances of networks occur in supply chains and retail and distribution.[6]

In a supply chain or production network, the core business, perhaps a manufacturer or a major retailer, acquires raw materials, component products and items for retail sales through a supply chain of independent businesses. This chain might be global with many links. Superficially, the supply chain appears to be a collection of completely independent contracts between separate businesses dealing at arm's length. However, the core business cannot function efficiently without managing the supply chain from one end to the other in considerable detail. Each component part or item for the supermarket shelves must arrive just in time, be perfect and conform exactly to the specification fixed by the core business. That demand requires effective control over the whole chain. Managerial control is often achieved through computer links: as soon as a product is taken off the shelf or removed from the factory inventory, computerised ordering systems send detailed instructions for prompt fulfilment

[4] G Teubner, *Networks as Connected Contracts* (ed with an introduction by H Collins) (Oxford, Hart Publishing, 2011).

[5] This feature sometimes leads to a confusion between networks and relational contracts, where close cooperation and loyalty to the purpose of the contract is also present, but there is no necessary connection between bilateral relational contracts and multilateral networks of connected contracts.

[6] Legal theorists of business networks are unsure whether these different types of business organisation are really the same kind of thing at all, except of course, that they are all neither exactly market nor hierarchy. Compare the informal structure of networks in P Krebs and S Jung, 'Introductory Remarks on the Phenomenon of Business Networks and on this Volume' in S Jung, P Krebs and G Teubner (eds), *Business Networks Reloaded* (Baden Baden and Farnham, Nomos/Ashgate, 2015) 11, 15, with the organised hierarchical structures emphasised in S Grundmann, F Cafaggi and G Venturi (eds), *The Organisational Contract* (London, Routledge, 2020). A similar tripartite division is found in EM Weitzenboek, *A New Legal Framework for Emerging Business Models: Dynamic Networks as Collaborative Contracts* (Cheltenham, Edward Elgar, 2012) 5–9.

all along the supply chain.[7] Businesses along the supply chain may also try to control their own suppliers in similar ways.

A retail or distribution network typically assumes the form of a hub-and-spokes organisation. A business format franchise such as the burger restaurant Macdonald's is a typical example. Here, the core business enters into contracts with many independent businesses to retail goods and services in accordance with the successful retail formula. The control exercised by the core business or franchisor over its satellite contractors or franchisees is usually intense, including setting the prices they can charge to customers and specifying the presentation of the goods and services. That is why every Macdonald's restaurant run by a franchisee looks identical, sells the same products and offers much the same prices. A slightly looser framework for networks has been deployed in the gig economy in businesses such as Uber, where the core business operates through a large number of purportedly independent contractors, the drivers.

It is an interesting question why networks appear to have proliferated as a form of business organisation in recent decades. This development may be linked to such factors as the globalisation of the economy and the expansion of the service sector in postindustrial economies. Communications technology has clearly facilitated the rise of networks by reducing the transaction costs of coordination and by offering instantaneous messages. Many connect the rise of networks to their alleged superior potential to develop innovative products and services through their distinctive mixture of multilateral cooperation and competition.[8] It is argued that the independent businesses have greater freedom to experiment than if they were merely part of a large, vertically integrated business. At the same time, the need to cooperate with other businesses to further the project may create opportunities for mutual learning, dissemination of knowledge and fertile collaborations. The independent businesses may become highly specialised, but then use interfirm collaboration to develop new and more complex products and services. No doubt, there are many other explanations for the proliferation of networks as a form of business organisation.

Interesting as those theories may be, my question here is different: should networks be recognised as a legal concept that refers to a particular kind of business organisation? Like the idea of 'relational contracts', discussed in scholarly articles for many years,[9] the concept of a network has been mooted in law books and journals,

[7] H Collins, 'The Weakest Link: Legal Implications of the Network Architecture of Supply Chains' in M Amstutz and G Teubner, *Networks: Legal Issues of Multilateral Co-operation* (Oxford, Hart Publishing, 2009) 187.

[8] Li-Wen Lin and Josh Whitford, 'Conflict and Collaboration in Business Organisation: A Preliminary Study' in J Braucher, J Kidwell and W C Whitford (eds), *Revisiting the Contracts Scholarship of Stewart Macaulay* (Oxford, Hart Publishing, 2013) 191; R Gilson, C Sabel and R Scott, 'Braiding: The Interaction of Formal and Informal Contracting in Theory, Practice, and Doctrine' (2010) 110 *Columbia Law Review* 1377; P M Baquero, *Networks of Collaborative Contracts for Innovation* (Oxford, Hart Publishing, 2020).

[9] I Macneil, 'Contracts: Adjstment of Longterm Economic Relations Under Classical, Neoclassical and Relational Contract Law' (1978) 72 *Northwestern University Law Review* 854, and other works collected in I Macneil, *The Relational Theory of Contract: Selected Works of Ian MacNeil* (ed D Campbell) (London, Sweet & Maxwell, 2001); C Goetz and R Scott, 'Principles of Relational Contracts' (1981) 67 *Virginia Law Review* 1089; H Collins, 'Is a Relational Contract a Legal Concept?' in S Degeling, J Edelman and J Goudkamp (eds), *Contract and Commercial Law* (London, Thomson Reuters, 2016) 37.

but it has remained a theoretical entity, a non-existent mythical beast.[10] Now that the legal concept of a relational contract has been recognised in the common law of England,[11] the question arises whether the time has come for networks also to be mythical beasts no more. The main consequence of the legal recognition of the category of relational contracts has been the acceptance that relational contracts as a class contain a term implied by law that requires good faith in the performance of the contract.[12] My question here is: what might be the legal consequences of the recognition of networks in law?

Although there have been some judicial references to a network in an appropriate context,[13] the idea is not been imbued with any legal significance.[14] Since network is not yet a legal concept, it is not possible to illustrate the legal consequences that flow from its application. Instead, what I shall try to demonstrate is how legal reasoning becomes confused and contorted because it fails to acknowledge the presence and legal significance of a network. The legal reasoning goes wrong either in the sense that the result appears deeply unsatisfactory from a commercial point of view, or that the reasoning employs artificial and convoluted techniques, often involving fictions, to reach a commercially sensible result. My argument is that the network, though invisible to the legal mind, is like a goblin that disrupts the conventional rules of the common law and leads it into error and confusion.[15]

If the presence and significance of the network were acknowledged by the law, however, these errors and confusions might be avoided. Sometimes, the recognition of the presence of a network explains the need to make minor adjustments to the normal rules of contract law or to interpret the commercial arrangements in the light of the context of a network. In other cases, the legal consequence that flow from the recognition of a network may require the implication of a contract in order to regulate the commercial relationships in the way that was intended and makes sense within the relations of interdependent businesses. Finally, networks may provide a way of handling claims both for and against members of a network by treating it as a collective actor that makes it members jointly and severally liable.

This chapter proceeds by examining four situations where arguably the goblin has been present and tempted courts into paradoxical reasoning that seems to flout basic tenets of the common law. The argument in each case is that once the network becomes visible to legal reasoning, the solution that the law should supply becomes much clearer and the paradoxes can be resolved by reference to the concept of a

[10] R Buxbaum, 'Is "Network" a Legal Concept?' (1993) 149 *Journal of Institutional and Theoretical Economics* 698, 704.

[11] *Yam Seng Pte Ltd v International Trade Corporation Ltd* [2013] EWHC 111, [2013] 1 All ER (Comm) 1321; *Braganza v BP Shipping Ltd* [2015] UKSC 17, [2015] ICR 449.

[12] *Bates v Post Office (No 3)* [2019] EWHC 606; H Collins, 'Employment as a Relational Contract' (2021) *LQR* 426.

[13] eg the legal arrangements for the consumer's use of credit cards was described as a 'network' by Lord Mance in *Office of Fair Trading v Lloyds TSB Bank plc and others* [2007] UKHL 48, [2008] 1 AC 316 [23].

[14] The economic concept of 'network effects' is used in competition law, but the meaning of network is different in that context.

[15] A goblin is defined as a wandering sprite that is usually mischievous but often malicious: *Encyclopedia Britannica* (www.britannica.com/art/goblin (accessed 29 September 2023)). The word 'goblin' derives from the Greek *kobalos* ('rogue').

network. Often the courts reach the commercially sensible result, but their reasoning is hard to explain and justify without resort to fictions and inconsistences. It is contended that if the concept of a network were acknowledged by the law, it could provide a principled and coherent basis for achieving those appropriate results.

II. BATTLE OF FORMS AND THE INTERPRETATION OF CONTRACTS

Under the normal rules of contract law, the interpretation and legal enforcement of one contract is not affected by the existence of other separate contracts. Each contract is regarded as an autonomous entity. It is interpreted and enforced according to its terms. But in the context of a network such as a supply chain, the parties to a contract may have the expectation that the existence of the chain of contracts should have a bearing on how each contract should be interpreted. Since the contracts function interdependently, a reasonable expectation is that the interpretation of each contract in the network should bear in mind the content of relevant terms in the connected contracts. The contracts need to function harmoniously rather than interfere with the successful production scheme of the network. That need may guide the interpretation of a contract or require the implication of suitable terms that reflect the interdependence of contracts inside the network.

An example arises in the law of offer and acceptance in connection with the 'battle of forms'. In these cases, both parties claim that their own standard terms of business apply to a transaction. The general rule that emerges from the application of the classical analysis of offer and acceptance is that the 'last shot' wins. In other words, the party who last communicates that the contract will be on their terms will succeed in having their own terms govern the contract. That rule derives from an application of the classical rules of offer and acceptance, because the final offer or counteroffer is accepted by conduct. An exception will arise where it is clear on the evidence that the parties both intended a different outcome, although proof of such a common intent is difficult.

The question of whether an exception to the 'last shot' rule should be recognised arose in *Tekdata Interconnections Ltd v Amphenol Ltd*.[16] The context of the case was a lengthy supply chain comprising at least five independent businesses. Rolls Royce was the ultimate purchaser. It bought engine control systems from a company called Goodrich, which itself bought cable harnesses for internal wiring from Tekdata. In order to manufacture the harnesses, Tekdata purchased connectors from Amphenol. Amphenol in turn acquired electronic filters from further suppliers. Quality control and just-in-time delivery were essential aspects of all these business relations. A dispute arose between Tekdata and Amphenol about late delivery and defective quality. Tekdata claimed that the terms of the contract were fixed by its purchase order. However, in its response to the purchase order, Amphenol had put on its confirmation a statement that it accepted the order on its own standard terms of business, which excluded or limited liability. The Court of Appeal applied the 'last shot' rule to confirm that Amphenol's terms applied to the dispute.

[16] *Tekdata Interconnections Ltd v Amphenol Ltd* [2009] EWCA Civ 1209, [2010] 1 Lloyd's LR 357.

Unlike the judge at first instance, the Court of Appeal declined to attach any weight to the context of the transaction in a highly coordinated supply chain. For instance, Goodrich had instructed Tekdata that it must acquire all its supplies of connectors from Amphenol to a specification required by Goodrich and at a price determined by Goodrich. Furthermore, Goodrich had a direct contract with Amphenol pursuant to which Amphenol agreed to supply connectors to Tekdata for the price determined by Goodrich. Furthermore, the terms on which Goodrich contracted with Tekdata were almost identical to those issued by Tekdata to Amphenol. These business relations had persisted for more than twenty years. The judge at first instance was also impressed by the point that, of course, in this high-tech environment, where safety was paramount, every participant in the supply chain would expect to deliver on time in absolute conformity to the specifications, so that the exclusions contained in the standard terms of business relied upon by Amphenol were wholly inappropriate. The judge concluded that the parties could not have intended those exclusion clauses to apply, with the consequence that the case represented an exception to the 'last shot' rule based upon the common intention of the parties.

Instead of looking at the context of the supply chain, the Court of Appeal examined the contract in isolation. Network theory argues that this approach is a mistake. It gives almost no attention to the purpose of the network, the interdependence of the parties and their contracts, and how each should be loyal to the interests of the whole network. The most important party in this case was really Goodrich, which was not a party to the contract in dispute, but which in effect forced the parties to contract with each other on terms and specifications largely fixed by Goodrich. It was the arrangements that Goodrich were seeking to make, themselves no doubt dictated by Rolls Royce, which were the crucial context of the case. It was therefore the terms of the Goodrich and Tekdata contracts which were the most significant ones for an interpretation of the contractual relation between Tekdata and Amphenol. The terms issued by Tekdata replicated those imposed by Goodrich. Tekdata was therefore right to assume that those terms governed its contract with Amphenol. What the Court of Appeal should have done is to recognise that in the context of a network like a supply chain, the battle of forms needs to be resolved in a different way because the terms of the contracts will almost certainly be driven by the requirements of the quasi-integrated system of production. As Catherine Mitchell has correctly observed about this case:

> [T]he stark error displayed in a case like Tekdata is to impose the discrete contract model on the network and regard an isolated instance of transacting as the prime focus of the legal analysis, ignoring the other aspects of the relationship and its 20-year history and the expectations amongst participants to which this would give rise.[17]

But the error of the Court of Appeal was not merely one of interpreting the contract out of context. The error was to apply the 'last shot' rule in a closely integrated

[17] Catherine Mitchell, *Contract Law and Contract Practice: Bridging the Gap between Legal Reasoning and Commercial Expectation* (Oxford, Hart Publishing, 2013) 59.

network. The 'last shot' rule must be ignored in the context of supply chains, because the terms of the purchase order are the commercially significant rules for the transaction. A different rule should be applied to the battle of forms in a supply chain network: the buyer's terms should govern the transaction whatever may have been the history of the exchange of the boilerplate. If that rule is ignored for the sake of the theoretical purity of conformity to the search for consensus during the battle of forms, the result will be disruption to integrated supply chains that will lead to inefficiency and commercially undesirable results.

III. IMPLIED TERM OF EQUITABLE TREATMENT BETWEEN MEMBERS OF THE NETWORK

In a second example of network theory, we should consider implied terms that may arise in contracts within the network. A particular term may not satisfy the orthodox test of business necessity if one focuses solely on the isolated contract in question. Yet if the context is expanded to include the operations of the whole network and its business model, it may be appropriate to imply terms that conform to the business logic of the network form of organisation. For example, there may be a need for an implied term that requires equal treatment or the absence of discrimination between different members of a network. This implied term is likely to arise in business format franchises and distribution networks.

For instance, in a distribution network of petrol stations, the oil company usually owns some petrol stations, but most are run by independent businesses according to a business format franchise or 'solus agreement'. These businesses take a lease of the premises and manage the operation according to strict instructions from the oil company concerning appearance, services, sources of oil products and prices at the pump. Each franchise is technically a separate contract between the franchisor and the franchisee. According to the classical law of contract, the content of the obligations and the performance of each franchise contract are strictly separate, with no bearing on the others. Network theory suggests, however, that because all the different franchisees depend on each other, as well as on the franchisor, for the successful functioning of the business model, it would be an error not to give weight to the connected contracts that surround each franchise agreement.

For example, in *Shell UK Ltd v Lostock Garages*[18] the context was a glut of petrol resulting from a major price increase imposed by the OPEC cartel. Lostock, a small garage, was compelled to charge 75p a gallon to customers because it was tied by a 'solus agreement' to Shell for supplies, whereas other independent garages could obtain cheaper supplies and remain profitable at a pump price of 70p a gallon. Two other Shell garages operated nearby and both of those were also able to sell at 70p a gallon because Shell provided them with rebates. One of those garages was directly owned by Shell. Lostock Garage sought to break the solus agreement that tied it to Shell. It claimed that Shell's conduct in discriminating against Lostock in its prices

[18] *Shell UK Ltd v Lostock Garage Ltd* [1977] 1 All ER 481, [1976] 1 WLR 1187.

and rebates was either contrary to the restraint-of-trade doctrine or a breach of an implied term. Lord Denning MR held that the restraint-of-trade doctrine invalidated the contract even though it seemed that when the agreement was formed it was reasonable and compatible with public policy. Here is the goblin at work: refashioning the doctrine of restraint of trade to function as a technique for ensuring fairness in contracts. In contrast, Bridge LJ held that there was an implied term in the contract that Shell would not discriminate against Lostock in the rebates it offered for the purpose of permitting them to compete with independent petrol stations. Price discrimination was a repudiatory breach of the implied term if it rendered it commercially impracticable to continue the franchise arrangement according to its express terms. Here the goblin finds a way to make conduct permitted by the express terms of the contract – the discretionary setting of rebates – a repudiatory breach of contract. On either view (both rejected by Ormrod LJ as contrary to the law), Lostock was entitled obtain cheaper supplies elsewhere, because it was no longer bound by the solus agreement.

Today, we might say that the franchisor was in breach of an implied term of good faith in performance that arose in this kind of relational contract when it discriminated against a particular franchisee in a way that was bound to put it out of business, thereby defeating the purpose of the franchise.[19] From the point of view of network theory, what Bridge LJ correctly appreciated is that the franchisor's treatment of other franchisees is relevant to the question of whether it is in breach of a good-faith requirement in a particular franchise contract. Unless the franchisor treats each franchisee fairly and does not discriminate in favour of its directly owned retail outlets, it will undermine the purpose and structure of the franchise operation as a network of connected contracts. In this example, legal recognition of the concept of a network would have explained why the conduct of the franchisor was a breach of the implied term of good faith even though the franchisor acted within its express rights under the contract. In networks, an implied obligation of good faith requires a hub business to treat its retail outlets equitably.

IV. IMPLIED CONTRACTS IN NETWORKS

Earlier it was noted that networks are comprised of functionally interdependent contracts, but it was also observed that not all of its members are joined by express contracts. In a supply chain, as we observed in the Rolls Royce case, although each link in the chain is formed by a contract, there may or may not be direct contracts between different participants in the chain. Similarly, in the hub-and-spokes model of retail distribution, there may not be direct contractual links between the different spokes. The absence of direct contracts between some parties to the network can be accounted for by the cost of formalising those relationships combined with an assumption that no such contracts are necessary when the network is functioning well. When something goes wrong, however, the absence of a direct contractual relationship to govern the risks requires a legal intervention.

[19] eg *Yam Seng* (n 11); *Bhasin v Hrynew* [2014] SCC 71, [2014] 3 SCR 494.

Carriage of goods by sea has sometimes provoked this issue. In a typical transaction, an owner of goods enters a bill of lading with a carrier to transport goods by sea to the destination required by the buyer or consignee. The carrier enters into a contract with a stevedore company to unload the goods at their destination port. The contract between the owner of the goods and the carrier includes a limitation-of-damages clause. A similar limitation-of-damages clause is contained in the contract between carrier and stevedore. If the goods are damaged by the stevedores, the owner may claim damages for the loss of the goods in the tort of negligence. There is no direct contract between the stevedores and the owner of the goods. As illustrated by *Scruttons Ltd v Midland Silicones Ltd*,[20] the doctrine of privity of contract holds that as a third party the stevedores cannot take the benefit of the limitation-of-damages clause in the contract between owner and carrier; nor can the stevedores rely on the limitation-of-damages clause in their contract with the carrier, because the owner of the goods cannot be subject to a burden in a contract to which it is not a party. The result that the owner of the goods can claim full compensation from the stevedores is commercially unsatisfactory, for it subverts the intended scheme of risk allocation for the loss of the goods as evidenced in the bill of lading, which is no doubt backed up with insurance arrangements.

Network theory suggests instead that where functionally interdependent contracts are connected in a production chain, as in the example of carriage of goods by sea, contracts should be implied, where appropriate, to complete the intended allocation of risks. On that view, there is a contract between the stevedores and owners of the goods that limits their liability when unloading the goods. The implied contract serves the functional purpose of the network, although it may not be strictly necessary for the network to operate. In the absence of such a legal concept of a network and a willingness to imply contracts to serve its purpose, the goblins quickly got to work to try to reconcile legal doctrine with the commercially sensible result.

Picking up on a suggestion by Lord Reid, the drafters of contracts for the carriage of goods by sea constructed an artificial framework for conferring a benefit on the stevedores by means of a slightly fanciful agency relation. Using a so-called *Himalaya* clause,[21] the revised contract of carriage stated that the carrier, when entering the bill of lading as principal, also entered the contract as an agent for subcontractors such as the stevedores for the purpose of creating a collateral contract containing the limitation of liability clause. By a majority, the Privy Council accepted this device in *New Zealand Shipping Co Ltd v Satterthwaite & Co Ltd (The Eurymedon)*.[22] This result was achieved despite the points that the stevedores did not know about this arrangement and nor was it certain that they would be used by the carriers, so it was unclear how there could be the necessary authority conferred on the carriers by an unascertained principal.[23] Similarly, since the stevedores were ignorant of the collateral contract, it was hard to fit the facts into the requirements for an offer, acceptance and consideration. The acceptance and consideration for the collateral contract could

[20] *Scruttons Ltd v Midland Silicones Ltd* [1962] AC 446 (HL).
[21] Following the name of the ship involved in *Adler v Dickson* [1955] 1 QB 158 (CA).
[22] *New Zealand Shipping Co Ltd v Satterthwaite & Co Ltd (The Eurymedon)* [1975] AC 154 (PC).
[23] See *Southern Water Authority v Carey* [1985] 2 All ER 1077 (QB).

only be the act of unloading the goods which provided the acceptance and consideration for the stevedores' contract with the carrier. This rickety scaffolding of an artificial agency relationship creating a collateral contract was challenged in subsequent cases by seeking factual distinctions that undermined the plausibility of the fiction of agency. Lord Wilberforce discouraged this practice, because it was abundantly clear that there was a commercial need to confer the benefit of exemptions on stevedores and other subcontractors, even though they were not parties to the original bill of lading.[24] Finally, in *The Mahkutai*,[25] Lord Goff asked when the perhaps inevitable step should be taken of recognising in these cases 'a fully-fledged exception to the doctrine of privity contract', thus escaping from all the technicalities.[26] In other words, the goblin tempted the judges to create a bypass of privity of contract of uncertain dimensions and dubious legal reasoning.

This mischief-maker tempted other courts to take a different approach to the problem caused by the absence of direct contracts between parties to networks. When constructing a building, it is typically the case that a main contractor will subcontract out much of the work to specialist subcontractors, which in turn may allocate work to sub-subcontractors. Within this network of contracts, it is unlikely that there will be direct contracts between all the different parties. Nevertheless, there is an integrated scheme of production, with the main contractor at its core. The presence of the network should permit the implication of contracts in order to confer benefits on network participants in support of the functioning and commercial purpose of the network. In this context, however, the goblin tempted the courts to solve the commercial problem by rewriting the law of tort.

In *Norwich City Council v Harvey*,[27] a building contractor agreed with the owner to make major renovations to an existing building. The work of rewiring the building was subcontracted. Since the owner of the building already possessed comprehensive fire insurance, the terms of the main contract with the builder excluded liability for fire damage to the building during the construction work. When the building was damaged by a fire caused by the negligence of the electrical subcontractor, the doctrine of privity prevented the electrical subcontractor from taking advantage of the benefit of the exclusion clause in a defence to a claim in tort because it was not a party to the main contract. In order to avoid that result and uphold the commercially sensible solution of protecting the subcontractor from liability, the Court of Appeal resorted to drastic action. It claimed that it was dealing with a novel situation in the law of negligence, so it had to decide whether the imposition of a duty of care was just and reasonable. It held that an exclusion of liability for fire in the main contract made it inappropriate to impose a duty of care to prevent damage by fire owed by the subcontractor in the tort of negligence.[28] Although the result makes

[24] *Port Jackson Stevedoring Pty Ltd v Salmond & Spraggon (Australia) Pty Ltd (The New York Star)* [1981] 1 WLR 138 (PC) 144.

[25] *The Mahkutai* [1996] AC 650 (PC).

[26] A step taken in Canada in *London Drugs Ltd v Kuehne & Nagel International Ltd* (1992) 97 DLR 4th 261.

[27] *Norwich City Council v Harvey* [1989] 1 All ER 1180 (CA).

[28] If the further question arose of whether the exclusion clause was invalid under the Unfair Contract Terms Act 1977, the reasonableness test should consider the presence of the network as highly relevant

commercial sense, the legal reasoning seems unsound. Was this situation of burning down a building with blowtorch really a novel one where the existence of a duty of care was uncertain?[29] Was it appropriate to use the rules designed to control the extent of recovery for pure economic loss to prevent a duty of care arising for damage to property? Perhaps the legal reasoning would have been more orthodox if the subcontractors had relied on a defence of *volenti non fit injuria*, by using the exclusion clause in the main contract as the necessary expression of consent. The problems with that argument were both that it had been rejected implicitly in *Midland Silicones v Scruttons*,[30] and that on its face the contract term only conferred the immunity on the main contractor.

As well as distorting the normal rules governing the duty of care in negligence, it is possible that the goblin was at work at the Law Commission. The Contracts (Rights of Third Parties) Act 1999 tries to sort out some of the problems of networks, without, of course, ever mentioning that mythical beast. The Law Commission justified the need for reform primarily on the ground that the doctrine of privity sometimes thwarts the intentions of the parties to the contract.[31] Section 1(1)(a) permits a third party to enforce a contractual term where the contract expressly provides that he may. That reversal of *Tweddle v Atkinson*[32] is clearly justified as merely an enforcement of the express intentions of the parties. But the reform could not stop there, because it would not address the commercial problems arising in networks described above.[33] Section 1(1)(b) also permits a third party to enforce a contractual term where the contract merely 'purports to confer a benefit on him'. To tie down this exception to privity, the statute also requires the third party to be identified by name, as a member of a class, or as answering a particular description.[34] As has been observed by critics of the legislation, the reform may tackle some aspects of problems for third-party beneficiaries of contracts, but at the expense of uncertainty regarding what counts as a 'purported' benefit. To grant the third party a right may also flout the intentions of the parties to the contract, who might not have wanted to give any enforceable right to the third party.[35]

in the circumstances. An exclusion clause that might look unreasonable when examined from a bilateral contract point of view, might appear an efficient and fair allocation of risk when viewed within the context of the network as a whole: R Brownsword, 'Network Contracts Revisited' in Amstutz and Teubner (n 7) 31.

[29] Compare *Marc Rich & Co AG v Bishop Rock Marine Co Ltd* [1996] AC 211 (HL) in the context of carriage of goods by sea where the duty of care owed by a classification society was truly a novel situation and the duty of care was negatived by the context of the bill of lading and its inclusion of the elaborate code to govern the network provided by the Hague–Visby Rules scheduled to the Carriage of Goods by Sea Act 1971.

[30] As pointed out by Lord Simon, dissenting, in *New Zealand Shipping v Satterthwaite* (n 22).

[31] Law Commission, *Privity of Contract: Contracts for the Benefit of Third Parties* (Law Com No 242, Cm 3329, 1996).

[32] *Tweddle v Atkinson* (1861) 1 B&S 393, 121 ER 762.

[33] A Burrows, 'The Contracts (Rights of Third Parties) Act 1999 and its Implications for Commercial Contracts' [2000] *LMCLQ* 540, 542–46.

[34] Section 1(3).

[35] See M Chen-Wishart, *Contract Law*, 7th edn (Oxford, Oxford University Press, 2022) 176–77; R Stevens, 'The Contracts (Rights of Third Parties) Act 1999' (2004) 120 *LQR* 292. The weakness of the justification based on the intention of the parties is revealed by the reversal of the burden of proof in s 1(2): the promisor has to show that the parties did not intend the term to be enforceable by the third party.

These problems of uncertainty and unwanted third-party rights are arguably illustrated in *Chudley v Clydesdale Bank plc*.[36] The bank accepted a letter of instruction from a property investment company to put the money of investors into a segregated client account, where the funds could only be removed under specific conditions. The property investment company collapsed, its owners were imprisoned for fraud, and the bank manager (who had failed to set up the segregated client account) was dismissed for gross misconduct. As a third party to the letter-of-instruction contract, one client successfully sued the bank for having failed to segregate his investment, thereby causing loss of his capital. The Court of Appeal held that the letter of instruction purported to confer a benefit on the class of investors in the property company. It was unnecessary for the investors to have knowledge of the benefit at the time of the letter of instruction. Although this result probably fits an analysis based on networks, arguably it goes further than the claimed justification of the reform to prevent the frustration of the intentions of the parties to a contract. In its interpretation of the statute, the Court was perhaps tempted by the goblin to stretch its provisions to address the commercial problem presented by a network.

In each of these examples, it has been claimed that judges have been tempted to distort the application of the traditional rules of law to address the commercial needs of networks. One device was an artificial construction of a collateral contract created by a tenuous agency arrangement. Another device was the denial of a duty of care in tort for damage to property in a standard situation normally covered by the law of negligence. A third device was to find a purported benefit under the statute when arguably the bank was not trying to benefit third parties at all and certainly not intending to give these unknown persons rights. Although the legal reasoning is questionable, the outcomes of the judgments make commercial sense. Where business is being conducted through connected and interdependent contracts between several parties, as in networks, the absence of a direct contract between the parties may have to be remedied to fulfil the purpose of the network.

In contrast to those complex devices, a more straightforward solution is to imply a contract between the parties in order to fulfil the purpose of the network. That is the solution proposed by network theory. It is true that the implication of contracts runs up against the important principle of freedom of contract: no one should have a contract imposed on them without their consent. For this reason, the courts have insisted that they will only imply a contract where it is necessary to give business efficacy to the arrangements.[37] In practice, that test of necessity has proven to be a high hurdle that prevents the implication of a contract in a network, because it is evident that the network can function normally without the implication of such a contract.

[36] *Chudley v Clydesdale Bank plc* [2019] EWCA Civ 344, [2020] QB 284.

[37] Bingham LJ in *The Aramis* [1989] 1 Lloyds LR 213 (CA) 224: 'necessary … in order to give business reality to a transaction and to create enforceable obligations between parties who are dealing with one another in circumstances in which one would expect that business reality and those enforceable obligations to exist'.

In the case of temporary agency workers, for instance, an employment agency supplies a worker who has a contract with the agency under which the agency finds the worker jobs and agrees to pay wages when work has been performed. The agency also has a contract with its client or end-user to supply workers in return for a fee. Under the contract between agency and worker, the latter agrees to perform the job according to the instructions of the client/employer as if he or she were an employee of the client. There is no express contract between the client employer and the worker. Nor can such a contract be implied according to the Court of Appeal because it is not necessary to give business efficacy to the arrangements.[38] As a consequence, the worker normally cannot claim any employment law or discrimination law rights against the client employer. Accordingly, if a manager of the client employer uses racial abuse against the worker, the client employer cannot be liable for discrimination; in the absence of a contract between worker and employer, there is no legal responsibility under the law of discrimination.[39] Nor can the agency be vicariously liable for the actions of the manager, who is an employee of a different legal entity. There is no inkling in these decisions about agency workers that the theory of networks might justify the implication of a contract between agency workers and the end-user, so that the workers can avoid exclusion from basic employment law rights.

In the Supreme Court in *Uber BV v Aslam*,[40] however, a glimmer of network theory can perhaps be detected. In that case, the responsibility of the defendant Uber for the drivers' statutory rights such as the right to a minimum wage depended on a finding that the drivers had a contract of employment or a contract to perform services personally on behalf of the defendant. A major obstacle in the way of the claim was that Uber argued that it did not have contracts of this type with the drivers. There was a written contractual arrangement between the drivers and Uber BV, the Dutch holding company, which owned the app through which taxi rides were booked, but that contract purported only to be an agreement for the drivers' use of electronic services through the app, including payment services. There was another business, Uber London, a subsidiary of Uber BV, which held the legally necessary licence for private car hire services in London. That licence covered the drivers. To comply with the licensing regime, Uber London had to carry out various checks on the drivers. However, there was no written contract between Uber London and the drivers. There was a written contract, however, between passengers and Uber BV which was formed when they downloaded the app onto their phones. That contract explained that the only transportation contract which the passengers formed by using the app was with the driver, not Uber BV or Uber London. At most, it was claimed, Uber London acted as an intermediary or booking agent between driver and passenger. In the UK Supreme Court, the idea that Uber London acted as a booking agent for the drivers was rejected on the ground that the drivers had never actually or ostensibly conferred authority on Uber London to act as their agent. Instead, the court inferred from the

[38] *James v Greenwich London Borough Council* [2008] EWCA Civ 35, [2008] ICR 545.
[39] *Muschett v HM Prison Service* [2010] EWCA Civ 25, [2010] IRLR 451.
[40] *Uber BV and others v Aslam* [2021] UKSC 5, [2021] ICR 657.

evidence that there was an implied contract each time a driver accepted a booking that amounted to a contract to provide a service personally for Uber London.

One feature of this reasoning is that the Supreme Court implies a contract in order to hold Uber London responsible for infringements of statutory employment rights in circumstances where the only express contractual agreement was between the driver and Uber BV. Uber London claimed that such an implication was unnecessary for the business efficacy of the arrangements. The Court implied the contract by insisting that 'the nature of the relationship has to be inferred from the parties' conduct, considered in its relevant factual and legal context'.[41] The Court applied a kind of network analysis (without using the terminology of networks) when Lord Leggatt said:

> In these circumstances Uber London would have no means of performing its contractual obligations to passengers, nor of securing compliance with its regulatory obligations as a licensed operator, without either employees or subcontractors to perform driving services for it. Considered against this background, it is difficult to see how Uber's business could operate without Uber London entering into contracts with drivers (even if only on a per trip basis) under which the drivers undertake to provide services to carry out the private hire booking accepted by Uber London.[42]

In other words, for the network operation to provide the taxi service to customers, it was necessary to imply a contract between Uber London and the drivers for the personal performance of services. The implication was necessary because, without the implied contract, Uber could not comply with the relevant regulations, nor could it perform the contracts to provide a taxi that it entered into with customers through the app.

Network theory suggests that such implied contracts will be common in the context of networks where direct contracts between all the members are missing. The drivers' contracts for work were implied by the Supreme Court to fulfil the purpose of the network and to secure compliance with the licensing regime. Similarly, a collateral contract was implied in *New Zealand Shipping v Satterthwaite* to complete the network allocation of risk with respect to the cargo, although the reasoning used the fiction of agency to do so. Similarly, Lord Denning's brilliant dissenting judgment in the earlier case of *Scruttons v Midland Silicones*,[43] following the earlier reasoning of Scrutton LJ,[44] described the stevedores as 'agents' in a non-technical sense, in order to convey the point that the stevedores were functioning within an integrated scheme of contracts for the carriage of goods in which third parties were impliedly bound by the allocation of risks in the bill of lading.

To imply contracts within networks, the test should not be the current strict test of necessity. Instead, the test for the implication of contracts should be concerned

[41] ibid [45].
[42] ibid [56].
[43] *Scruttons Ltd v Midland Silicones Ltd* [1962] AC 446 (HL).
[44] *Mersey Shipping and Transport Co Ltd v Rea Ltd* (1925) 21 LlLR 375 (KB) 378. See also *Elder, Dempster & Co Ltd v Paterson, Zochonis & Co. Ltd* [1923] 1 KB 420 (CA), where Scrutton LJ, dissenting, applied the same principle to protect an 'agent', in that case the shipowner.

to achieve the purpose of the network as an efficient system of production according to its intended allocation of risks. In the carriage of goods by sea, the bill of lading serves as a framework agreement that regulates the risks and liabilities of all the parties involved in the network even if they do not have express contracts with the parties to the bill of lading. Those arrangements for the allocation of risks are best fulfilled by the implication of a direct contract between third parties and parties to the bill of lading. The carriage of goods could take place without such an implied contract, but the purpose of the network and its allocation of risks would be undermined. Similarly, the business model as a kind of booking agency envisaged by Uber has been successful the world over without the need to imply a contract with the driver. Yet the purpose of the network of providing taxi rides efficiently to customers under the protections afforded by a licensing system could only be achieved through the implication of a contract between drivers and Uber London, for the provision of their services personally. Contrary to the reasonable expectations of the allocation of risks in the network, without the direct contract for work, customers would not have any rights against Uber for failure to comply with the contract of hire and they would not be fully protected by the licensing regime. The scope of the production network and those participating in it would determine which third parties could take the benefit of implied contracts in their favour. The range of protection would extend to all those participating in the carriage of goods by sea or in the provision of taxi services. That scope of protection for third parties might also justify the protection of third-party investors for the failure of the bank to segregate their investments even though they were not direct clients of the bank.

V. THE PRINCIPLE OF TRANSFERRED LOSS AND THE NETWORK AS A COLLECTIVE ACTOR

In my last example of the goblin at work, the presence of a network of connected contracts may help to explain the otherwise mysterious principle of 'transferred loss'. The problem arises from a basic principle that a claimant can only be awarded damages for breach of contract for its own loss and not those of third parties. Thus, if all the loss has been suffered by a third party, the claimant or promisee should not be able to recover more than nominal damages. The idea of a claim for 'transferred loss' is one that permits the promisee to claim damages against the promisor for the third party's loss, a clear breach of the normal compensatory principle of damages. Lord Denning MR introduced the idea of transferred loss in *Jackson v Horizon Holidays*,[45] where he permitted the father of a family to claim damages for a disastrous holiday not only for himself but also for the bad experience of the members of his family. That decision was subsequently doubted or confined to its special facts, perhaps revealing a suspicion that the goblin had been at work again. Yet the idea of recovery for a third party's loss has been extended occasionally to commercial contexts.

[45] *Jackson v Horizon Holidays Ltd* [1975] 1 WLR 1468 (CA).

In the case of goods being transported by sea by a carrier, it is usually anticipated that the owner of the goods (the consignor) will transfer ownership to a consignee or buyer prior to the arrival of the goods at their destination. If the goods are damaged after transfer of ownership to the consignee on route, the consignee may have no direct contractual right of redress against the carrier. In *The Albazero*, Lord Diplock held that:

> [W]here it is in the contemplation of the parties that the proprietary interests in the goods may be transferred from one owner to another after the contract has been entered into and before the breach which causes loss or damage to the goods, an original party to the contract, if such be the intention of them both, is to be treated in law as having entered into the contract for the benefit of all persons who have or may acquire an interest in the goods before they are lost or damaged, and is entitled to recover by way of damages for breach of contract the actual loss sustained by those for whose benefit the contract is entered into.[46]

Subsequently, the question has arisen whether that decision represents a broader principle of uncertain scope, in which a promisee may claim damages for breach of contract when the losses fall on a third party even where the promisee is under no obligation to carry out the repairs or compensate the third party.[47] For the present, although the position is uncertain, the furthest that the Supreme Court has been prepared to go is to acknowledge obiter a principle that permits the promisee to recover damages for the third party's loss if the known objective of a transaction is to benefit a third party or a class of persons to which a third party belongs, and the anticipated effect of a breach will be to cause loss to that third party, and the third party suffers loss as the intended transferee of property affect by the breach.[48]

The theory of networks holds that where the contracts in this triangular relation are interconnected to such an extent that they are a quasi-integrated organisation, the normal rule that limits the promisee's damages to its own loss should be displaced. Since the network functions to a considerable extent as a single entity for its productive purpose, it should be permitted to defend its interest in the performance of contracts by its members or by external parties by permitting the promisee to claim damages on behalf of the network as a collective actor. The presence of a network should ensure that in some way the claimant is accountable to other members of the network for the allocation amongst them of any successful claim for damages.

To view a network as a collective actor approximates to treating it in some respects as having a legal personality. The promisee can claim damages on behalf of all members of the network because they owe each other express and implicit obligations to further the purpose of the network. The principle of transferred loss in *The Albazero* functions in accordance with this interpretation of network theory. The consignor can sue for the losses to the consignee caused by damage to the goods sold because the purpose of the network was to transfer property under a regime that

[46] *The Albazero* [1977] AC 774 (HL) 847 (Lord Diplock).

[47] *Darlington Borough Council v Wiltshier Northern Ltd* [1995] 1 WLR 68 (CA); *Alfred McAlpine Construction Ltd v Panatown Ltd* [2001] 1 AC 518 (HL).

[48] *Linden Gardens Trust Ltd v Lenesta Sludge Disposals Ltd* [1994] 1 AC 85 (HL); *Swynson Ltd v Lowick Rose LLP* [2017] UKSC 32, [2018] AC 313 [14] (Lord Sumption).

allocated risks and liabilities to all members of the network. In effect, the consignor claims substantial compensation on behalf of the network when the goods are damaged, and then compensation is allocated where the loss happens to lie.

This view of the network as a collective actor would reject the limitation on the principle of transferred loss approved in *Alfred McAlpine Construction Ltd v Panatown Ltd*.[49] The judicial committee of the House of Lords agreed that the problem addressed by the principle of transferred loss was a 'black hole' created by the doctrine of privity of contract, in which the promisee who had suffered no loss could not claim substantial damages against a defendant even though a third party had suffered substantial loss from the promisor's breach. Having defined the problem in that way, once the third party turned out to have a direct contract with the defendant, the privity issue disappeared and there was no need to adopt the principle of transferred loss. According to the theory of networks as connected contracts, however, the real black hole in that case was not the doctrine of privity of contract but the absence of a legal concept of a network. If the courts had appreciated the legal significance of the network in that case (where all the companies concerned were cooperating to employ the contractor to construct a building), the presence of a direct contract between the third party and the defendant contractor would only have been of marginal relevance to the dispute. The more important question would have been whether, when viewed in the context of the network of contracts, the promisee should be entitled to sue for substantial damages on behalf of the network viewed as a collective actor. From that point of view, the presence of a direct contract between third party and the defendant contractor merely strengthened the argument that the contracts were interconnected and mutually dependent, as in a network, and that therefore it was possible to treat the network as a collective actor whose members could sue on behalf of the network as a whole.

To regard a network as a kind of legal person is hard to contemplate, however, because the common law is reluctant to recognise new types of legal person. In the law of property, the idea that there are only a limited and closed number of proprietary interests that are legally recognised in the law is a well-known, if controversial, proposition, sometimes called the *numerus clausus* principle.[50] I think that a similar statement could be made about the law of persons: there are only a limited number of persons or entities with legal personality through which they can obtain legal rights and fall under legal obligations. The main categories are adult persons and corporations, but there are also trusts, partnerships, agents, unincorporated associations, statutory bodies, and some special statutory kinds of legal entities such as trade unions. The theory of networks hints at the claim that there is a need to recognise another kind of legal entity: the business network. Recall that a network is more than a contract or collection of contracts, but it is less than a business organisation such as a corporation or partnership. To recognise networks as a new kind of legal person

[49] *Alfred McAlpine Construction Ltd v Panatown Ltd* (n 47).

[50] Sarah Worthington appears to believe, however, that *numerus clausu*s does not apply to proprietary interests in the common law: S Worthington, 'Revolutions in Personal Property: Redrawing the Common Law's Conceptual Map' in S Worthington, A Robertson and G Virgo (eds), *Revolution and Evolution in Private Law* (Oxford, Hart Publishing, 2018) 227.

would therefore breach the principle of *numerus clausus* in the law of persons. The idea of networks possessing legal personality is dismissed by even those who recognise the existence and economic importance of networks as far too 'visionary'.[51]

The proposition advanced here differs, however, from a fully fledged legal personality for networks. The argument is rather that a member of the network should be able to sue and be sued on behalf of all the members of the network. If any one member of the network were liable in contract and tort, they would all be liable jointly and severally. The rules and allocations of risks within the network would then be used to distribute any costs and benefits. On this model, a claimant who is external to the network does not need to identify its responsible member. The legal claim could be brought against any member of the network. The members of the network would have to decide among themselves which members would actually pay the damages. It would also be possible for a member of the network to bring a claim against an external third party on behalf of the network, with any compensation paid by the third party to be distributed appropriately among members of the network. That representative action on behalf of the network and the subsequent distribution obligation within the network appears to lie at the core of the apparently anomalous principle of transferred loss.

The view of networks as a collective actor might have an interesting application to supply chains in business, particularly those involved in fashion.[52] In order to stock their high-street retail stores in the United Kingdom, businesses such as Primark and Next acquire clothing from suppliers, who themselves acquire goods from subcontractors and sub-subcontractors. The supply chain spans the globe. To minimise costs and to ensure just-in-time delivery of stock, the retailers insist that all its contractors use a computer monitoring and ordering system. The working conditions in the sweatshops of south-east Asia are often appalling, although this work may still be the most attractive option for earning a living for the workers involved. Imagine that in one sweatshop in Thailand, the local authorities find that the workers have not been paid the local statutory minimum wage. Their direct employer is liable to pay all the compensation, which may bankrupt it and throw the workers out of a job. Can anyone else be held responsible for the arrears of wages? There have been many attempts to hold the core business, in this case the UK retailers, to account, in part because they have deep pockets and in part because they are within a jurisdiction where the legal system functions effectively. The main obstacle to holding such hub businesses legally responsible is (apart from the fact that they are not the employer of the complainant workers) that they may have made reasonable efforts to stop the underpayments, and that most of the fault for lack of monitoring of compliance with local laws may be the responsibility of an intermediary in the supply chain.

[51] S Grundmann, 'Contractual Networks in German Private Law' in F Cafaggi (ed), *Contractual Networks, Inter-firm Cooperation and Economic Growth*, 1st edn (Cheltenham, Edward Elgar, 2011) 116, 124–25. Cf Teubner, *Networks as Connected Contracts* (n 4), 1–3, 72, 145ff.

[52] The Circle, *Fashion Focus: The Fundamental Right to a Living Wage* (London, 2017) www.thecircle.ngo/wp-content/uploads/Fashion-Focus-The-Fundamental-Right-to-a-Living-Wage-Compressed.pdf (accessed 29 September 2023).

The idea of regarding the network as being a collective actor supports the suggestion that the whole supply chain or production network should be held responsible for violations of labour rights by businesses within the network. Liability for the compensation would be shared jointly and severally among all members of the network. The members could then argue about their respective shares of liability depending on their levels of responsibility and their ability to afford the cost. In particular, the underpaid workers in Thailand could recover their wages from other members of the network without bankrupting their employer and putting themselves out of work. In this way, the concept of a network may help us address better one of the most troubling questions of globalisation, which is how we might hold to account the powerful Western corporations of the vanguard Western economies in their control, regulation and exploitation of supply chains or production networks in the rear-guard economies, which lack the economic and technological capabilities to compete in the knowledge economy.[53]

A similar argument for a collective actor might be applied to the triangular relations of temporary agency workers. Instead of inventing a contract between the agency worker and the end-user, it could be said instead that both the agency and the end-user are party to a network that is jointly responsible for compliance with employment and discrimination law. Again, the agency workers would be able to claim their legal rights against any or all parties to the network, leaving it to those businesses to sort out their respective liabilities to pay the compensation awarded by a tribunal. This development of a status of joint employers has not been accepted in England but has been recognised in some US states.[54]

In all these examples, the argument for extending the whole liability to the network as a collective actor for this purpose is that it functions economically very much like a firm or an integrated business organisation, even though it remains in law a collection of functionally connected contracts between independent businesses. The presence of formal legal boundaries between organisations belies the substance of an economically integrated system of production. The main practical reason for treating the network as a collective entity and responsible for the breach of contract or regulations that harms a third party is to prevent networks from evading responsibility for their actions by claiming to be unconnected businesses that cannot be responsible for the wrongs of other businesses. The network's liability could be strict, even if ultimately the costs were distributed according to culpability or ability to pay.

VI. CONCLUSION

The traditional contrast between the choice of a business either to make goods and services within the organisation or to buy them externally from other independent businesses breaks down in the context of networks. The production network uses

[53] R Unger, *The Knowledge Economy* (London, Verso, 2019); H Collins, 'Fat Cats, Production Networks, and the Right to Fair Pay' (2022) 85 *MLR* 1.

[54] G Davidov, 'Joint Employer Status in Triangular Employment Relationships' (2004) 42 *British Journal of Industrial Relations* 727. Joint employer liability may be possible through vicarious liability in tort.

contracts and understandings about a shared business purpose between independent businesses to bind them together to such an extent that it makes sense to conceive of networks as a new kind of business organisation. Networks are neither markets nor firms: neither contracts within the organisation nor contracts between strangers. They are invisible to legal reasoning, yet accommodating them forces legal reasoning into uncharted waters.

Like goblins, business networks frequently cause mischief in commercial law, because they disrupt the binary legal framework of firms or markets and tempt courts into inexplicable doctrinal paradoxes such as an agency without authority, the implication of unnecessary contracts and recovery for another's loss. Once the nature of networks is properly understood, these paradoxes become easier to understand. The courts appreciate that they should try to uphold the purpose of the network as an innovative commercial structure, but they lack the legal concept of a network that would enable them to carve out these instances as requiring a rational and closely confined qualifications of fundamental principles such as freedom of contract, privity of contract and the compensatory rule for awards of damages.