

The Accession of Identical Chattels

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1. INTRODUCTION

WHAT IS THE proprietary result of two identical chattels acceding to one another? Imagine two javelin throwers competing at a range. Competitor One throws his javelin, which he owns, and it lands flat on the ground. Competitor Two then throws his javelin, which he owns, and, by some great misfortune, it impales Competitor One's javelin through the centre. Try as they might, they cannot pull the two apart.² Who now owns the resultant single chattel?

This article offers an answer. The word 'is' in the opening question is meant as a limitation. Established rules and concepts in property law will constrain my enquiry. Policy and fairness will have their role, but will not dictate the outcome. Those expecting a stunning normative proposition are advised not to hold their breath. Instead, this article attempts a conceptual response to a suggested rule for accession. The doctrine of accession will, indeed, be my second constraint: whatever rule results, it must be a rule *within* the doctrine of accession, not a replacement for it.

¹ BA in Law candidate, Lady Margaret Hall, Oxford. I would like to thank the editors of the *Cambridge Law Review*. The usual disclaimer, that any errors are mine, applies. On the occasion of this journal's inaugural edition, I would like to express that it is excellent to see this journal established to encourage and promote academic contributions from amongst the newer members of the legal community, and I hope that this journal has many interesting years to come.

² This inseparability might be more common if they were using the *pilum*, a heavy javelin used by the Roman army, the tip of which was designed to buckle on impact.

My purpose, in part, extends the concept of a case note to an analysis of two comments from secondary literature. They each last just two sentences and, while found in the same volume, are separated by almost 700 pages. They are the following, the first by Birks and the second by Hudson and Palmer.

Suppose two sections of pipe or sheets of metal are welded together. In that case, if the pieces belonged to different owners, co-ownership of the resulting unit is the only solution.³

If the two conjoined entities were of equal status so that neither could be regarded as principal or accessory, a situation not contemplated in the Roman texts, it has been suggested [citing Birks] that the solution should be ownership in common. The inactive party could, in principle, sue the improver in conversion and, on payment of damages, the totality would again become the improver's sole property.⁴

Taken in combination, these two passages propose that, where two chattels accede to each other, the outcome should be co-ownership of the resultant chattel. My purpose is to demonstrate that this proposition is problematic, and that instead another analysis is preferable. The plan for my argument is simple: Section 2 adds flesh to the presently bare bones of the proposition, Section 3 demonstrates the problems, and Section 4 contains my alternative suggestion.

³ N Palmer & E McKendrick, *Interests in Goods* (2nd edn, LLP 1998) 238.

⁴ *ibid* 932–933. This passage is not free from ambiguity. It was suggested to me that the passage proposes sole ownership for the 'active' party, being a party who plays a role in causing the accession, and that the 'inactive' party gets a claim in damages. I do not read Hudson and Palmer's passage to be saying this, however, for a number of reasons. First, discussion of awarding title to an active party, *qua* active party, sounds like manufacture, but the passage is written about the law of accession, which knows no such rule as awarding title based on involvement in procuring accession. Accession can result from a causal sequence which includes proximate human conduct, but does not necessarily require human input. Second, granting a personal award in damages because of a mechanism of property law is unheard of. It could still be a claim in tort, but abstraction means that, regardless of the operation of tort law, a pure proprietary outcome must also be devised in the common law of property. Thus, the law of property would not distinguish between tortfeasors and innocent parties. Third, for the 'inactive party' to have *locus standi* to bring an action for conversion which terminates his title, at which point the 'improver' becomes the sole owner, the inactive party must previously have had title, and that must have been as co-owner in order that the termination can elevate the improver's title to 'sole ownership'. Hudson and Palmer chose to cite Birks' proposition with no dissent, and thus seem to accept co-ownership as the correct outcome. Therefore, as I understand it, Hudson and Palmer envisage a scenario where A owns javelin X, B owns javelin Y. B deliberately does something to cause the javelins to accede. This results in co-ownership. However, because A does not want to be a co-owner, he brings an action in conversion either for the destruction of X as a separate chattel, or for some subsequent act of dealing by B. This action extinguishes A's co-ownership title.

2. THE PROPOSITION

It is useful to begin by contextualising the co-ownership proposition. Accession is the doctrine in property law which governs situations where two things physically attach to one another in such a way that one, the secondary chattel, loses its separate physical identity. If A's fence is painted with B's paint, then the paint accedes to the fence, A having title to the whole. If C's brick is used to build D's house, then the brick accedes to the house, D having title to the whole. In property law, this functions as a mechanism of destruction of property rights.⁵ When the secondary accedes to the primary, its loss of identity equates to its physical destruction. Physical destruction entails the destruction of the title to it. The title to the primary chattel simply persists, the only change being the physical addition. Therefore, unlike the related doctrines of manufacture and mixture, accession is not a mechanism of acquiring rights. It is, and is only, a method of destroying rights.

Often, the operation of accession is easy to predict. If a difficulty were to arise, it would be for one of two reasons. The first, which is not presently concerning, concerns whether the degree of physical attachment between the chattels is sufficient to amount to accession. May it suffice to say for the present that the 'test' for accession of two chattels remains uncertain. English law premises the general test on two variables:⁶ the degree of attachment, and the object (meaning 'purpose') of the attachment.⁷ Both of the main authorities, however, concern chattels acceding to land, so the discussion is always carried out in parallel with, and hence in cognisance of, the factors relevant for considering fixture. Other tests have arisen in cases specifically addressing two chattels across the Commonwealth. One asked whether the chattels can be separated without destroying or seriously damaging either of them.⁸ Another whether the things would be considered as having ceased to have a separate existence.⁹ One case asked whether the separation would destroy the commercial utility of the chattels.¹⁰ The most favoured test, however, holds that accession will occur through either loss of physical identity or through practical inseparability.¹¹ Whatever test is adopted, this is not our present

⁵ B McFarlane, *The Structure of Property Law* (Hart 2008) 163–164; W Swadling, in A Burrows (ed) *English Private Law* (3rd edn, OUP 2013), 4.470–4.471.

⁶ Note also the more specific indicia suggested by Lord Clyde in *Elitstone Ltd v Morris* [1997] 1 WLR 687 (HL).

⁷ *Holland v Hodgson* (1872) LR 7 CP 328 (Ex Ch); *Elitstone Ltd v Morris* (n 6).

⁸ *Bergouhan v British Motors* (1929) 20 SR (NSW) 61.

⁹ *Per Manning J* (dissenting), *Lewis v Andrews & Rowly Pty Ltd* (1956) 56 SR (NSW) 439.

¹⁰ *Regina Chevrolet Sales v Riddel* (1942) 3 DLR 159.

¹¹ *Reidell v Associated Finance* [1957] VR 604, 610; *Thomas v Robinson* [1977] 1 NZLR 385, 386–8; and now see *McKeown v Cavalier Yachts* (1988) 13 NSWLR 303.

concern. Herein, this article will assume in any discussion that there was sufficient attachment to amount to accession.

Our focus is instead on the second problem: identifying the primary and the secondary chattel. The authorities are anything but extensive. English law does offer a few basic rules, most notably that land is always the primary chattel.¹² Once again, however, the better authorities for accession of two chattels come from the southern hemisphere. In the New Zealand case of *Thomas v Robinson*,¹³ the court held that items fitted to a car, including significant functional components like a new engine, carburettor and exhaust system, would accede to the car. The components are secondary; the body of the car is primary. In Australia, it was held in *McKeown v Cavalier Yachts*¹⁴ that the components fitted to the hull of a yacht acceded to it, despite the components being worth significantly more than the hull. There was some suggestion that the result may have been the reversed, had they been fitted as one unit, rather than individually. Hence, the measure for determining the primary and secondary item is not value. Rather, the rule appears to be that whichever chattel contributes more significantly in determining the physical identity of the resultant chattel constitutes the primary chattel. Such thinking is evident in Roman Law, from which much of the applicable common law derives. Buildings and building materials accede to the land.¹⁵ Corn accedes to land.¹⁶ A purple thread always accedes to the garment into which it was woven, regardless of comparative value.¹⁷ Writing accedes to the parchment.¹⁸ There is, of course, the traditionally exceptional case of *picturae*, in which the canvas accedes to the painting, apparently justified by the ‘policy’ that a valuable painting should not be considered the secondary of the canvas on which it is painted.¹⁹ Nevertheless, the *picturae* rule is consistent with the test of physical identity. An artistically painted surface obtains its form primarily from the image drawn upon it. When one, visiting the Louvre, sees da Vinci’s *Mona Lisa* on the wall, one’s primary reaction is to see it for the image it displays, not the object upon which it is drawn. Thus, the contribution to resultant physical identity rule appears to be implicit throughout the Roman law.

However, the situation contemplated in this article, the accession of two ‘equal’ or ‘identical’ chattels, causes that rule to falter. Two scenarios spell out the issue. First, two pieces of one metre copper piping lie end-to-end, one owned by Adam, the other by Bob. Somehow they become welded together, creating a

¹² *Hobson v Gorringe* [1897] 1 Ch 182 (CA).

¹³ *Thomas v Robinson* (n 11).

¹⁴ *McKeown* (n 11).

¹⁵ D.47.1.7.10. (Gaius II *rer. cott.*); J.2.1.29.

¹⁶ D.47.1.7.13. (Gaius II *rer. cott.*); J.2.1.32.

¹⁷ J.2.1.26.

¹⁸ G.2.77; D.47.1.9.1. (Gaius II *rer. cott.*); J.2.1.33.

¹⁹ G.2.78; D.47.1.9.2. (Gaius II *rer. cott.*); J.2.1.34. One should note, however, that Paul gives a contrary opinion at D.6.1.23.3., in line with the rules for *scripturae*.

two metre pipe. Assume that the welding constitutes an accession. Who owns the two metre pipe? Second, as described in the introduction, two javelins become transfixed. Who owns the resultant object? The two contributions cannot be separated on the basis of which contributed more significantly to the resultant physical identity, because the contributions are equal. Nor could a test of value be applied. Therefore, it appears that the present law offers no answer to the question of which of two identical chattels is primary, and which secondary, and hence it cannot determine who holds the title, and who loses their title.

The two passages under consideration volunteer a solution to fill this legal void. Birks, writing in the context of fluid mixtures, asserts that co-ownership would be the *only* solution in the accession of identical chattels scenario. He acknowledges that the scenarios in question are not cases of mixture (or that, if they could be classified as mixture, the classification is tenuous).²⁰ However, predicting that the court would not be willing to apply the rules of accession either because they would not be willing to subordinate either chattel, he suggests that another rule is needed. Therefore, as a rule independent of both mixture and accession, but applying the outcome of the former²¹ to a scenario involving the latter, he proposes the co-ownership solution. For this, he cites the Scottish case of *Wylie and Lochhead v Mitchell*.²² One might add, in passing, that the same solution would result in Switzerland²³ and Ethiopia,²⁴ but this appears to arise from the conflation of the principles of accession and mixture. Palmer and Hudson apply Birks' idea, seemingly, as a rule of *accession* rather than *in place of accession*.²⁵ They observe that Roman law offers no solution and, in the footnote, only repeat Birks' citation of *Wylie and Lochhead*. Therefore, their proposition is that Adam and Bob would, through applying the doctrine of accession, co-own the pipe, and Competitors One and Two would co-own the affixed javelins. I will now dispute the acceptability of this proposition.

²⁰ Palmer & McKendrick (n 3) 238. The mixture analysis is addressed below.

²¹ Co-ownership is the result of a non-consensual mixture in English Law, whether by accident (*Buckley v Gross* 122 ER 213; (1863) 3 B & S 566; *Spence v Union Marine Insurance* (1868) LR 3 CP 427) or wrongful intention (*Indian Oil Corporation v Greenstone Shipping, The Ypatianna* [1987] 3 All ER 893 (Comm Ct)). If one accepts the Commonwealth authorities, a different rule may apply for consensual mixture: see *Farnsworth v Federal Commissioner for Taxation* (1949) 78 CLR 504; *Coleman v Harvey* [1989] 1 NZLR 723. However, since accession does not distinguish the outcome on the basis of consent/intention, this need not concern us presently.

²² 1870 M 552.

²³ Article 727 of the Swiss Civil Code.

²⁴ Article 1183 of the Ethiopian Civil Code of 1960.

²⁵ Whether they really intend to call this a rule of accession, or just a rule related to accession, is immaterial for present purposes. I wish to question how *accession* would deal with the identical chattels scenario. The present article cannot, therefore, take Birks' liberty of avoiding the question, disapplying the doctrine and creating a different rule. It must find an answer within the law of accession regardless of how exactly Birks and Palmer and Hudson phrase their proposition.

3. CRITICISMS OF THE PROPOSITION

There are three criticisms of the proposition. Each criticism assumes that it proposes a rule *within* the doctrine of accession, as this article seeks to find a rule within the parameter of that doctrine. They do not necessarily deny its validity absolutely. They do, however, call into question its conceptual coherence and normative desirability. Before developing these criticisms, however, two assumptions made by Birks must be remedied. First, he says that co-ownership is the only possible solution. Since this article intends to offer another, that assumption must be doubted. The second is that the doctrine of accession insists on ranking one chattel as primary, the other as secondary. While that is indeed its usual operation, in the absence of any specific authority on this point it is not an assumption one is entitled to make *per se*. With this in mind, let us proceed.

A. *Strength of Authority*

*Wylie and Lochhead v Mitchell*²⁶ cannot serve as authority for the co-ownership solution within the law of accession. Instead, as Birks envisaged, it can at best stand for a separate proposition in place of the law of accession.

Messrs Wylie and Lochhead were funeral undertakers in Glasgow. They wanted a new hearse, and reached an agreement with Robert Hutton, a coachbuilder. He would build the main shell of the hearse, but they would supply the equipment and ornamentation which would be attached to it. In the end, their contributions cost £95 and £112, respectively. Mr Hutton undertook to build the carriage for them. He missed the completion date agreed and then, having nearly completed the work a few months later, went bankrupt. The work was completed at a minor additional expense. Wylie and Lochhead petitioned the trustees of Hutton's bankruptcy for the delivery of the hearse, claiming that they had the property in it. The trustees disputed their claim. The petitioners applied to the court, arguing before the First Division that the hearse was their absolute property, and that therefore they were entitled to recover possession *rei vindicationis*. They argued that either (i) the contract was not a sale, but rather a *locatio operarum* under which Hutton merely supplied his services and materials, or alternatively (ii) that it was a sale, but that property had passed by constructive delivery when the carriage acceded to the ornaments and equipment which they had supplied.

The court found that the contract was a contract of sale, so the matter turned on whether accession had occurred. A close reading of each judgment evidences a subtly different approach. Lord President Inglis held that accession does not apply, for two reasons. First, it was impliedly impossible to distinguish a primary and secondary chattel on the facts. Second, he considered that the (Roman) rules of accession are not always 'based on natural equity' or free of internal conflict,

²⁶ *Wylie and Lochhead* (n 22).

as Grotius identified regarding, for instance, the differing rules for *scripturae* and *picturae*.²⁷ He held that manufacture was also inapplicable.²⁸ Instead, his Lordship felt compelled to formulate a new principle according to natural equity, and natural equity only offered one solution: common ownership.²⁹ Lord Ardmillan considered that accession did produce an answer: the carriage was primary, the equipment and ornaments secondary. However, he considered that fairness demanded that this outcome, which admittedly was a narrowly drawn distinction on the rules of accession, was avoided. Instead, he held that the fairer solution was (impliedly) to treat this case as one of consensual mixture and manufacture, which he asserted led to the fair outcome of co-ownership.³⁰ Lord Kinloch impliedly acknowledged that the carriage was primary. However, he, like the others, felt that the all-or-nothing outcome of accession would be unjust because of the comparable values of the two contributions. This led him to assert common ownership as the fair and equitable outcome.³¹

Therefore, this case is no authority for a rule of co-ownership arising from the accession of identical chattels, for three reasons. First, accession seemed to offer a solution on the facts. Lords Ardmillan and Kinloch both considered that, were accession to be applied, the carriage would be the primary object. Therefore, the majority did not consider the chattels identical. Applying a test based on physical identity (not value, as Birks suggests), their Lordships considered that the carriage more greatly contributed to the end identity. Only the Lord President considered that it would be difficult to identify a primary chattel, and hence that the existing rules of accession were frustrated. Therefore, the majority contemplation of accession suggests that it could have applied in the ordinary way, with no additional rules being necessary. Second, the case may not factually be one of accession at all. It may be better analysed as one of combined mixture and manufacture, much like the Canadian case of *Jones v De Marchant* (albeit with a different outcome).³² This analysis is adverted to, but rejected, in the Lord President's judgment. However, it appears to be the implied basis of Lord Ardmillan's judgment. Third, as already acknowledged and as Birks identified, the case is decided independently of, rather than upon, the rules of accession. All three of their Lordships make statements that they are not prepared to decide the case on the rules of accession because they considered that such an outcome would not be in accordance with natural equity. Therefore, they all locate the common ownership solution explicitly beyond the law of accession, rather than as part of it.

The first two reasons pose a problem for Birks. They demonstrate that this was not a case of identical chattels, or involving accession, at all. Birks locates

²⁷ *ibid* 557.

²⁸ *ibid* 556.

²⁹ *ibid* 558.

³⁰ *ibid* 561.

³¹ *ibid* 564.

³² (1916) 28 DLR 561.

his solution in a case which, on examination, never had to grapple with the problem. True, identical chattels may be an a fortiori case, because the issue in *Wylie and Lochhead* was with distinguishing incredibly similar chattels. That is not the problem, however. Instead, the rule from *Wylie and Lochhead*, when it is seen as applying in cases of distinct chattels, becomes more directly questionable. It operates as an alternative, seemingly available at the court's discretion when it considers the ordinary operation of accession unfair on the basis of the similarity of the chattels. Therefore, it risks undermining the general rules of accession. Instead of offering one rule, the law would offer two discretionary alternatives, a situation apt to introduce unpredictability. While one may respond that this need not concern us overly as the rule can only be invoked when the chattels are 'similar enough', Professor Birks would surely have been amongst the first to disavow such a vague and unpredictable threshold. A rule based on undefined or unqualified 'sufficiency' is no rule at all, but rather a vicious circle. 'When are two chattels sufficiently similar to invoke the *Wylie and Lochhead* rule?' 'Why, when they are sufficiently similar, of course!' *Wylie and Lochhead* neither concerns identical chattels nor offers a supportable rule, and hence is not good authority. As such, the proposition should not draw any strength from its reliance on this case.

We are left now in a legal wilderness. The one case mapping our path is no longer there to support us. The reasoning herein must, therefore, be theoretical. This commences with the two further arguments against the common-ownership proposition, one conceptual, the other normative.

B. *The Conceptual Problem*

The mechanisms of property rights and remedies, something with which Professor Birks engaged closely in his work, render the co-ownership outcome problematic. Rights arise from causative events. The causative events, according to Birks, are fourfold: consent, wrongs, unjust enrichment, and miscellaneous others.³³ Assume that the accession was not consensual. Granted, Adam and Bob could have consensually fused the pipes, but, seeing that there is a chance that it was not because accession is not inherently a consensual act (as one sees in the javelin case), assume that it was not consensual. Since accession is not inherently wrongful either—it can occur accidentally—assume that there is no wrong. There does not appear to be any miscellaneous causative event. While one might describe accession as a causative event in itself, this analysis is difficult to sustain, because, the question of the proper outcome for identical chattels aside, there is no acquisition of rights during accession (as explained above), and thus it does not function as a cause. The causative events are selected by a legal system as a matter of policy, and our

³³ Birks' literature on this is ample. See, e.g., *The Classification of Obligations* (Clarendon Press 1997); 'Rights, Wrongs, and Remedies' (2000) 20 OJLS 1; 'Personal Property: Proprietary Rights and Proprietary Remedies' (2000) 11 Kings College LJ 1.

system has followed the Roman rule of electing to treat accession as a mechanism of destruction alone. Nor can unjust enrichment operate to alter property rights, because the co-ownership solution must mean that the old titles are still destroyed by the accession in order for the titles as tenants in common to arise, and hence there is no transfer of title upon which to premise a claim in unjust enrichment. The factual gain in matter should not be sufficient without a transfer of title.³⁴ In any event, the common law only tends to award personal rights in response to unjust enrichment, so altering property rights is unlikely to be the proper response.³⁵ Thus, accession is not a causative event which can trigger rights, which is why accession is only a doctrine of destruction of property rights. Therefore, there is no explainable mechanism by which the co-ownership title can arise.

Nor should the co-ownership operation of accession draw support from the law of manufacture and mixture. Unlike accession, they both create and destroy rights. Non-consensual mixture results in co-ownership.³⁶ Manufacture grants title to the manufacturer.³⁷ Both instances also seem to lack the existence of a causative event, often involving very similar facts to accession. Therefore, one might reply, if these doctrines can create rights, why should accession not be able to? That argument rests on an assumption that the operation of mixture and manufacture is justified. This is not the place for a full assault on those doctrines. Instead, some basic observations will have to suffice. The title resulting from manufacture may be explainable without needing to identify a causative event in the process of manufacture. Manufacture results in a *nova species*³⁸ (hence why old titles to the materials are destroyed). As McFarlane observes, manufacture almost inevitably involves a person controlling the thing at the time or soon after the process is completed.³⁹ Therefore, it may be the case that the manufacturer owns the thing not because of the process of manufacture itself, but because of the simple operation of the ordinary *Armory v Delamirie*⁴⁰ rule for acquiring title by intentionally taking physical control of the chattel. Mixture is, however, problematic. There is no reason for a legal mechanism to operate at all, because the individual components in the mixture (if, perhaps, only at a molecular level) retain their original physical identities, and hence there is no physical alteration to the chattel necessitating the alteration of title. The only change is the creation of an evidential uncertainty.⁴¹ The rule for mixture may need to be reconsidered, but that is for another time. It

³⁴ W Swadling, 'Ignorance and Unjust Enrichment: The Problem of Title' (2008) 28 OJLS 627.

³⁵ W Swadling, 'Rescission, Property, and the Common Law' (2005) 121 LQR 123, 135.

³⁶ See above (n 21).

³⁷ *Borden (UK) Ltd v Scottish Timber Products Ltd* [1981] Ch 25 (CA). The author will simply assert that the outcome in *Jones v De Marchant* (n 32) is erroneous and, in any case, not binding on the English Courts.

³⁸ A 'new thing'.

³⁹ McFarlane (n 5) 161.

⁴⁰ 93 ER 664; (1722) 5 Stra 505.

⁴¹ See further the final paragraph of Section 3.B.1., below.

is sufficient to note for the present that, even if this evidential uncertainty could be treated as a miscellaneous causative event, it could not operate in the scenarios presently postulated, as it is evidentially clear who contributed which original chattel. Therefore, the rules of mixture and manufacture should not call into doubt the conclusion that accession involves no causative event.

Thus, the mechanisms of property law cannot explain how new rights, such as co-ownership, arise. The co-ownership solution is, therefore, conceptually problematic.

1. A Digression: Mixture Analysis

An entirely alternative analysis arising from this discussion of mixture could say that we should analyse the scenario in question *as* mixture. This raises a question into which English law fears to tread: what is the difference between accession and mixture? The commonest comment, prefacing any express endeavour to supply an answer, is that the borderline is difficult to define, and possibly fluid on a casuistic basis.⁴² After that caveat, there normally follows one of two views. Hudson and Palmer seem to assume that the distinction is in terms of reversibility/separability: accession concerns physically irreversible unions, mixture concerns physically reversible but practically problematic unions.⁴³ Birks adopts a different view, in terms of the quality of the chattels: if the chattels are identical, it is mixture; if the chattels are non-identical, it is accession.⁴⁴ Since the subject matter of this article arises from Hudson and Palmer's application of the co-ownership outcome to identical chattels, it operates, aside from this sub-section, on the assumption that Hudson and Palmer have identified a supportable distinction. Nonetheless, the alternative analysis merits examination in passing.

Birks' view has much to commend it, but no decisive argument in its favour. It certainly fits a pattern. In mixture cases, it is normally two versions of the same product—oil,⁴⁵ jute,⁴⁶ tallow,⁴⁷ cotton,⁴⁸ and so forth—involved on the facts. Accession cases tend to involve different chattels. However, such facts equally accommodate Hudson and Palmer's distinction; the molecules in the fluid mixture cases, and the 'grains' (for the cases of jute and cotton, meaning 'bales') in the granular mixture cases are not physically bonded together. Conversely, the facts

⁴² e.g. Palmer & McKendrick (n 3) 227–228.

⁴³ *ibid* 932–933.

⁴⁴ *ibid* 227–228.

⁴⁵ *Indian Oil Corporation* (n 21).

⁴⁶ *Sandeman v Tyzack* [1913] AC 680 (HL).

⁴⁷ *Buckley v Gross* (n 21).

⁴⁸ *Spence v Union Marine Insurance* (n 21).

involving non-identical chattels tend also to involve a physical bond. Thus, the cases sustain both patterns, so that cannot be decisive.

Birks may seem to have some assistance from authority, inasmuch as Staughton J in *Indian Oil Corporation*⁴⁹ seemed to premise the application of the doctrine of mixture on similarity of identity: ‘where B wrongfully mixes the goods of A with goods of his own, which are *substantially of the same nature and quality*, and they cannot in practice be separated, the mixture is held in common⁵⁰ (emphasis added). However, there are two issues with resting Birks’ case on this lone sentence. First, the clause immediately after the added emphasis identifies separability—Hudson and Palmer’s test—as part of the distinction as well, and hence it does not select one test. Second, Staughton J’s judgment draws unmistakably on Roman principles,⁵¹ yet it is not clear that a distinction in terms of identity of the chattels represents the Roman position. The Digest never claims to advert specifically to the issue of identical chattels.⁵² However, at D.6.1.23.3., Paul comments that the welding of two identical materials results in loss of identity for the secondary material (an outcome consistent with accession), while in the case of soldering with lead (thereby introducing a different material), a different outcome would apply. This different outcome appears to be mixture, because he surmises that the *actio ad exhibendum* and then a *vindicatio* could be brought for the component which was attached by soldering. He says further that, in response to the *actio*, the soldered-on component could be detached, unlike the welding case. Thus, where the materials are identical, accession occurs upon welding, and the resultant chattel is inseparable. However, in the case of soldering, the materials are non-identical and mixture results, which is regarded as separable. Contrary to Staughton J’s conclusion, therefore, this passage hints at a Roman distinction between accession and mixture based on separability, not identity. Thus, the initial arguments for Birks’ distinction have less force than is *prima facie* apparent.

Hudson and Palmer’s position also has some merit, primarily based on the practical oddity of the application of Birks’ test. Identicalness would determine which doctrine applies in an occasionally surprising fashion. Physically bonding two circular copper pipes, one 100cm and the other 105cm, is accession, resulting in sole title for the owner of the 105cm pipe. Physically bonding two circular copper pipes, both 100cm, is mixture, and hence results in co-ownership. Small physical differences make for large legal differences. A still odder case is one of mixing sand. Suppose 100kg of black sand ‘mixes’ (in a lay, not legal, usage) with 100kg of white sand. The two are non-identical in terms of colour, chemical composition and, in all likelihood, size and form, and so on Birks’ test this is accession. However, one may have severe difficulty in specifying which is primary, and hence who is

⁴⁹ *Indian Oil Corporation* (n 21).

⁵⁰ *ibid* 360.

⁵¹ P Stein, ‘Roman Law in the Commercial Court’ [1987] 46(3) CLJ 369, 371.

⁵² Palmer & Kendrick (n 3) 932.

the owner. More helpfully, the sand scenario would be mixture on Hudson and Palmer's test as the granules are physically separable; separation is only practically problematic. Therefore, the separability test seems preferable. It also seems to have some Roman support. Gaius writes, '*sed et si sine voluntate dominorum casu confusae sint duorum materiae vel eiusdem generis vel diversae, idem iuris est.*'⁵³ The verb used for mixing is '*confundere*'. In Latin, this meant equally 'to mix', 'to pour' and 'to confuse'. The Roman terminology for mixture, therefore, had connotations of evidential uncertainty (a central mechanism by which practical inseparability can arise on Hudson and Palmer's test for mixture) implicit within it, a sense lost by the English rendering of 'mixture'.⁵⁴ Moreover, this passage accepts that the rules of mixture may apply to materials of a different nature—*materiae diversae*—which squarely rejects the Birksian identicalness test. Accepting this conclusion, applying the doctrine of mixture would not be the answer, as its application is not determined on a criterion pertaining to identity.

C. *The Normative Problem*

Returning to our main focus, co-ownership may also be normatively undesirable. A party may not want to find themselves a 50% co-owner of a chattel, because this could effectively lock them into the property. In *Wylie and Lochhead*, the Lord President noted that, 'such being their joint interest in a subject which is not capable of division, they must either bring it to sale and divide the proceeds in the above proportion, or the one must buy off the other by paying him the value of his proportion.'⁵⁵ Co-ownership is a common solution for mixtures because the mixture can be physically divided down into shares for each tenant in common to take. Co-ownership is common for land because land is capable of multiple simultaneous uses and is relatively permanent.⁵⁶ However, indivisible chattels are a different story. If Bob uses the two metre pipe, nothing much is left for Adam. But if Adam refuses to let him use it, Bob is equally likely to refuse any proposed use which Adam intended. They reach a stalemate. As the Lord President advises, they would have to seek a sale, either to their co-owner or to a third party. In principle, selling to a co-owner is a reasonable solution but, in practice, difficulties may arise. If one co-owner falls insolvent, the other co-owner will not be able to sell them

⁵³ (D.41.1.7.9. (Gaius II *rer. cott.*)). 'If, without the consent of the owners, two materials, whether of the same or different nature, have been '*confusae*', the rule is the same'.

⁵⁴ 'Mixture' derives from the alternative Latin verb '*miscere*', which possessed a more definite sense of 'mixture' or 'stirring', and is occasionally also used in the texts, e.g., D.41.1.7.8).

⁵⁵ *Wylie and Lochhead* (n 22) 559.

⁵⁶ Co-ownership of land does, of course, entail some issues. Clear examples of contention arise, for instance, where the parties refuse to cooperate over sale or possession. The resulting situation is now dealt with under sections 12–15 of the Trusts of Land and the Appointment of Trustees Act 1996, which have been the basis of much litigation. The distinction here is that, while land ordinarily has the potential to sustain multiple simultaneous uses, chattels normally do not.

their share. It is likely to be even more difficult to find a third party buyer. If the two present owners are at conflict over the use of a chattel, buying a share of that chattel seems to be an unattractive proposition. The problem of the undividable chattel is perhaps a reason why co-ownership has not been adopted as a solution in manufacture.

Hudson and Palmer suggest an alternative to sale in the second sentence of their quote, that one owner could sue the other for conversion under section 10 of the Torts (Interference with Goods) Act 1977, and hence, through a payment of damages, receive the value of their share and in turn lose their share of the title by section 5. However, this relies on one party being sufficiently active in relation to the chattel so as to commit a course of dealings which amounts to a conversion. If neither party is active enough (perhaps because they have both refrained from using the chattel until the dispute is resolved), then an action in conversion will not lie and, hence, this solution will be unavailable. Remember that, in this regard, many dealings which ordinarily amount to conversion will not be enough because, as co-owner, the defendant has a right to possession of the chattel. The only way he could commit conversion, therefore, is to deliberately deal with the chattel in such a way that excludes the other co-owner. Aside from destruction, transfer which successfully passes the full title and some more exclusive instances of use, no other instances appear to qualify. Thus, the action in conversion will not be widely available.

Furthermore, the damages for this conversion would be assessed at the price of the share in the new thing, not the old thing.⁵⁷ While this does not seem problematic *prima facie*, it may allow the active party to profit from his wrongdoing. Imagine the market value of one metre of copper pipe is £10, while two metres costs £16. When two pieces of copper pipe become joined together, if one applies Hudson and Palmer's suggestion, the inactive party who sues in conversion will only get his 50% share of the £16 back, not the full £10 (the value of the chattel

⁵⁷ *Kuwait Airways v Iraqi Airways (Nos 4 and 5)* [2002] 2 AC 883 (HL), [67]. However, it is recognised that, on occasions, the value of the award in conversion will be varied by the court: see, for example, *BBMB Finance v Eda Holdings* [1990] 1 WLR 409 and *IBL v Coussens* [1991] 2 All ER 133. If the court does permit such a variation, then this further objection is nullified.

he lost to the accession). Thus, the active party could profit from his conversion.⁵⁸ The inactive party can only sue for the present value of his share (£8). However, if the active party later physically separates the pipes into two, he will once again have £20's worth of piping. He makes an overall gain of £2, which, as explained above, cannot be remedied in unjust enrichment because there is never a transfer of title. He thereby profits from his wrongdoing. Therefore, because of its narrow availability and potentially inadequate remedy, the conversion solution is inappropriate. Thus, if one wishes to avoid lock-in and its potential consequences, one is advised to reject co-ownership as an outcome of accession.

4. ALTERNATIVE ANALYSIS

So, where does the answer lie? How can we formulate a rule for accession? The total efforts of Birks and Hudson and Palmer rest on the premise that the solution lies in triggering a new title. The solution here, however, looks to a different premise. It re-examines the factual analysis, from which flows an alternative legal consequence.

The attachment, I suggest, results in a *nova species*. Why? Since the original chattels are equal, the identity of each chattel changes by at least 100%. The one metre pipe undergoes a 100% increase into a two metre pipe. One javelin becomes two. The new chattel is as least as much different from the old chattel as it is similar. At most, the old chattel represents 50% of the identity of the new chattel, and this is likely to be less if the new chattel has additional characteristics not present in the old, such as a bend in the middle of the pipe through imperfect alignment where previously the two pipes were both straight. The more chattels that are involved, the more obvious this view becomes. If twenty planks of wood, all owned

⁵⁸ It was suggested to the author that such a wrong falls within Birks' scheme of potential causative events, and thus could justify an instance of acquisition, permitting co-ownership. Three observations should cast a sufficient shadow over this suggestion that it may be set aside. First, a response to wrongdoing which alters property rights can result in double compensation or double punishment (depending on how one would prefer to rationalise the action). There is likely to be a tort action—here, probably conversion—alongside. Thus, if property rights were altered in response to wrongdoing too, the wrongdoer would pay twice: once in a personal liability for damages, and once in the alteration of a property right. Hence, accession and mixture (see (n 21)) do not vary their outcome on the basis of wrongdoing. Second, the suggested rule for wrongful accessions could only be applied as an exception to the general rule of accession of identical chattels, as it can only apply in the context of wrongs, and many such accessions would not be wrongfully caused. Third, as Swadling notes (see (n 35) 136), there is no situation in which the common law responds to wrongs by granting property rights rather than an award of damages (subject to the power to revest in cases like *Car & Universal Finance v Caldwell* [1965] 1 QB 525, which Swadling there demonstrates is probably wrongly decided). The case for an interest in equity is also weak, as again equity normally responds in damages. Damages have been affirmed for third party liability in *Dubai Aluminium v Salaam* [2002] UKHL 48, [2003] 2 AC 366, and although there is increasing indication that a constructive trust may arise in cases of breach of fiduciary duty (e.g. *Attorney General of Hong Kong v Reid* [1994] 1 AC 324 and *FHR European Ventures v Cedar Capital Partners* [2014] UKSC 45, [2015] AC 250), there is a strong argument that these cases are wrongly decided (e.g. D Crilley, 'A Case of Proprietary Overkill' [1994] RLR 57; W Swadling, 'Constructive trusts and breach of fiduciary duty' (2012) 18 *Trusts & Trustees* 985).

by different people, somehow become joined together, it is hard to claim that any one of them plays the majority role in defining the physical identity of the resultant chattel. While the case seems weaker for two chattels because it is more plausible that one may play the majority definitional role, it is only a difference of degree. There is no apparent reason why one should treat the accession of two planks of wood or twenty planks of wood differently. Instead, the same conclusion should apply to both cases. Therefore, returning to a two chattel scenario, neither original chattel should be considered the majority contributor to the physical identity of the resultant chattel. Neither is primary. Instead, they may both be regarded as secondary things which lose their physical identity during the accession. Therefore, the resultant thing has no prior identity, and hence is a *nova species*.

This analysis depends, admittedly, on what qualities one prefers to emphasise when evaluating physical identity. However, some philosophical and linguistic guidance from our Roman counterparts may be usefully noted. *Nova species* is a concept most closely employed in the law of manufacture, stemming from the Roman doctrine of *specificatio*. Evident in the Sabinian-Proculian school debate over the proper proprietary outcome of manufacture was a difference in prior metaphysical philosophy. The Sabinians accepted the Stoic view of matter over form, hence why they held that the contributor of the materials should gain the title. The Proculians, however, followed in the Aristotelian and Peripatetic tradition which championed form over matter, hence awarding the creator of the new form—the manufacturer—title.⁵⁹ Justinian's basic rule for irreversible *specificatio* followed the latter tradition,⁶⁰ as has English law.⁶¹ One should understand from this that one cannot simply assume that any one test is definitive of physical identity, as prior philosophical debate permits views to vary. However, the English legal tradition leans towards considerations of form over substance.

Van der Merwe has helpfully surveyed the Digest for the different tests applied in practice, and he isolates the three common verbs applied: *facere*, *transfere*, and *transfigurare*.⁶² The concept of *facere* is unhelpful beyond manufacture, as the word is heavily premised in active human involvement, which accession does not necessarily demand. The best guidance is gained from the prefix '*trans-*'. Van der Merwe notes that these verbs have a sense stronger than that ordinarily seen for creating a *nova species*. Therefore, a high threshold for *nova species* was one which required that the things 'crossed' a boundary of physical identity. Our stronger case, that of twenty pipes or pieces of wood acceding, seems to fit this test; whatever one would describe twenty pipes roughly and chaotically latched to one another as,

⁵⁹ C van der Merwe, 'Nova Species' (2004) 2 Roman Legal Tradition 96, 100–101.

⁶⁰ J.2.1.25., adopted from what was apparently the opinion of Gaius, differing from his School (D.41.1.7.7 (Gaius II *rex. cott.*)).

⁶¹ *Borden* (n 37).

⁶² Van de Merwe (n 59). Although any direct attempt at translation will inevitably result in some degree of loss of the original sense, one can roughly equate these respectively to the English 'to make', 'to shift' or 'to transform' (in this context), and 'to transform' or 'to change form/appearance'.

‘a pipe’ or ‘a plank of wood’ is not the first term which comes to mind, not least because they will have probably lost their functional utility as simple pipes or planks. In any case, perhaps a more useful description of the ordinary threshold is gained, beyond a survey of verbs, from Ulpian’s simple description *mutata forma*.⁶³ Whilst ‘changed’, ‘altered’, or ‘modified’ may be suitable translations, one cannot ignore the etymology of the English noun ‘mutation’ from *mutatio*. Could we say that two separate but equal chattels fusing to one another amounts to a modification or a mutation of their original forms? In ordinary English sense, one supposes that we could. Thus, one should consider oneself able to accept that a *nova species* does arise, even if doing so is initially metaphysically disquieting.

From these facts involving a *nova species*, the legal analysis arises. The ordinary rule that title vests in the first party into physical control applies. They become the absolute, highest title-holder. As for the other party, they may or may not be compensated. If the accession was consensual, they can make their own arrangements for remuneration. If the accession was wrongfully committed by the title-holder, they will likely be liable for the destroyed title in conversion, trespass and/or negligence. If the accession was accidental, there is a risk that they may not get compensation, but then the case for compensating them is weaker. Occasionally, property gets destroyed by pure accident, by natural causes and similar. Such are the risks of life.⁶⁴ Such also is the utility of insurance. If a person suffers a loss accidentally, so be it.

This analysis avoids the flaws of the co-ownership proposal. It does not rest on doubtful authority. Indeed, it rests on no authority at all. The case is conceptual. It avoids having to identify some absent trigger for new rights as a result of accession. It avoids co-ownership, so parties need not fear lock-in.

Is this the only solution? Not at all. I have not sought to demonstrate that the co-ownership solution is in any way inherently ‘wrong’, whatever that term would mean in this context. I have, however, sought to expose its flaws and offer an alternative analysis which may, in comparison, be preferable. One may, indeed, dislike both analyses, and, rejecting Hudson and Palmer’s grounds of distinction between mixture and accession, step beyond the boundaries of accession and instead analyse these cases as instances of mixture (regardless of the semantic oddity of calling two welded-together pipes a mixture), and thus reach a co-ownership outcome by traversing a different path. None of the solutions are perfect, though I hope that any quibbles with my proposition will only be metaphysical dissents. And perhaps this *prima facie* imperfection was to some extent inevitable: all the theories have to override some accepted assumptions to reach their goal, because *prima facie* the common law is unprepared to tackle identical chattels.

⁶³ D.10.4.9.3. (Ulpian 24 *ed*).

⁶⁴ Those risks being reflected by the law in what Honoré terms ‘(risk-)distributive justice’: see ‘The Morality of Tort Law—Questions and Answers’ in DG Owen (ed), *Philosophical Foundations of Tort Law* (Clarendon Press 1995) 73, 78–85.

5. REFLECTION

Having embarked on an almost untraveled adventure, we have taken an untrodden path, yet hopefully have reached our journey's end. Within the territory of accession, our paths remain two in number, though I suggest that the *nova species* analysis offers the less troublesome route. We may have no cases, and yet this does not prevent us from supplying an answer. And, when supplying this answer, I have suggested that we are cognisant of two things. First, one must ensure that one's solution is conceptually coherent. I hope to have demonstrated that the *nova species* analysis is coherent (indeed, it is not just coherent, but simple too), but that, for want of a causative event, the co-ownership analysis is not. Second, normative desirability must never be forgotten. Co-ownership risked lock-in, forcing parties into a potential proprietary stalemate through a process which may arise entirely naturally and accidentally. I do not think that the *nova species* analysis suffers from the same degree of normative deficiency, though I ask my reader to consider this for themselves. There may yet be alternative solutions, perhaps an entirely different outcome asserted on the basis of pure policy, or by side-lining accession and applying a different rule like mixture. Both of these alternatives likely depend heavily on the facts of any given case. In any event, it has not been my purpose to assess them, and I have not done so. Remaining within the bounds of established property law doctrine and confined within the law of accession, the *nova species* analysis should be sustainable.