CONTRACTUAL SPECIFICATION OF NEW PROPERTY RIGHTS IN RESOURCES: THE PROBLEM OF MEASUREMENT COSTS

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Free market environmentalists propose new private rights in resources to support market-based methods of regulation, without reference to the relational nature of property and the need to coordinate multiple rights in assets. For property law to perform its coordination function, the rights must be well-defined and supplied with a full set of rules (specifications) for their creation, enforcement and termination. As the development of fully specified new property rights is costly, Australian legislators are embracing a shorthand method which relies on contractual specification of the rights by private parties, and empowers them to bind their successors in title. A requirement to record the agreements is insufficient to address the measurement costs to third parties, who must assess the meaning and effect of variable terms that may or may not be within the scope of the enabling Act.

I INTRODUCTION

Current legislative approaches to environmental regulation are strongly influenced by free market environmentalists who advocate the use of markets as a regulatory tool. By putting a price on natural resources, markets operate to shift them from lower to higher value uses. Price signals generated by markets are expected to create incentives for parties to use the resources more sustainably and productively. A similar mechanism is used to control emissions of greenhouse gases or other forms of pollution. For example, where rights to emit are transferable as ‘credits’ under an emissions trading scheme, markets send price signals that generate financial incentives to reduce emissions.

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Legislatures have introduced new transferable rights in natural resources such as fisheries and water, and in the commercial benefit of forestry carbon sinks, to serve as objects of exchange in resource markets. Some of the statutes that create new types of rights in resources designate them as property rights while others are silent on this point. Difficult conceptual issues can arise in determining whether a resource right can be described as proprietary in nature, and for which purposes. This article adopts a broad functional definition of property as rights in rem, that is to say, rights in relation to land or its resources which the rights-holders can enforce against persons with whom they have no contract.

Gray and Gray observe that it is axiomatic in land law that property rights should be well-defined: ‘Even inside the field of recognised proprietary rights there is no place for vague or loosely defined entitlement.’ The classic statement is from Lord Wilberforce in *National Provincial Bank v Ainsworth*:

> Before a right or an interest [in land] can be admitted into the category of property, or of a right affecting property, it must be definable, identifiable by third parties, capable in its nature of assumption by third parties, and have some degree of permanence or stability.

While the common law’s insistence on definitional rigour in property may reflect a formalist concern for its internal coherence, the advantages for commerce have been noted. It is a fundamental tenet of post-Coasean institutional economics that if property rights are not well-defined, the resulting uncertainty will increase

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4 Barry Barton, ‘Property Rights Created under Statute in Common Law Legal Systems’ in Aileen McHarg et al (eds), *Property and the Law in Energy and Natural Resources* (Oxford University Press, 2010) 80, 82 3, 90, noting that ‘resources legislation often does a poor job of saying whether a permit granted under it carries a proprietary element’: at 93. This reticence may be due to the multifarious benefits and liabilities that the law attaches to property rights: at 97–8; Carl McCamish, ‘Fisheries Management Act 1991: Are ITQs Property?’ (1994) 22 Federal Law Review 375, 380.

5 Courts have adopted various approaches to determining whether statutory resource rights can be characterised as property, including analysing the attributes of the rights to see if they have the characteristics of property (eg, excludability and alienability), whether they are analogous to an existing class of property, and whether they are accorded the ‘commercial reality’ of property within the relevant industry: Barton, above n 4, 82–93, citing *Royal Bank of Canada v Saulnier* (2008) 298 DLR (4th) 193 (SCC); McCamish, above n 4, 377 9.


9 Barton suggests that while formalism has been much criticised, its focus on the rights and liabilities of parties contains useful lessons for conceptualising new property: Barton, above n 4, 94 6.

10 Gray and Gray, above n 7, 212.
transaction costs and impede the efficiency of the market in allocating the resource to higher value uses.\textsuperscript{11} Transaction costs include the cost of discovering what rights exist in an asset (search costs), assessing the scope and attributes of the rights (measurement costs) and negotiating to acquire them (bargaining costs).

Property law has a coordination function of ensuring that property rights are well-defined and specified so that multiple rights in the same asset can coexist and disputes can be resolved. Each class of property right is uniquely \textit{defined} by identifying its ‘incidents’ or the components of the ‘bundle of rights’ it confers,\textsuperscript{12} and the essential characteristics that distinguish it from other classes of right. For example, an easement (other than special statutory easements)\textsuperscript{13} must have the characteristics of an easement as defined by common law.\textsuperscript{14} An attempt to create an easement that lacks one or more of the characteristics will fail, although it may create a different type of right such as a lease, licence or \textit{profit à prendre}.\textsuperscript{15} Rules must also be \textit{specified} for dealing with the right, including its mode of creation, recording or registration, sharing, subdivision, transfer, leasing, charging, enforcement, priority, compulsory acquisition, termination and extinguishment. Some of the specifications are specific to classes of right, such as rules allowing easements and profits to be acquired by long user, and goods to be transferred by delivery.

In their haste to create private property rights in resources, Australian legislatures have overlooked the need to ensure that new rights are as clearly defined and specified as the traditional classes of property. Since the 1990s, a shorthand method of creating statutory property rights in land and resources has gained favour with legislators. A statute introduces a class of right which it defines and specifies only partly, even minimally. It empowers landowners to inject their own content by use of a statutory agreement with another party or parties. The statutory agreement may itself constitute a freestanding right,\textsuperscript{16} or it may be ancillary to another type of right created by the statute.\textsuperscript{17} The statute gives the statutory agreement extended operation as a right in rem by deeming it to ‘run with the land’ and to bind classes of third parties such as the landowner’s ‘successors in title’,\textsuperscript{18} ‘successors in title and assigns’,\textsuperscript{19} ‘persons deriving title


\textsuperscript{12} Honoré identified ten different incidents of property ownership: A M Honoré, ‘Ownership’ in A G Guest (ed), \textit{Oxford Essays in Jurisprudence} (Oxford University Press, 1961) 107, 112–24. He is generally credited with introducing the conception of property as a ‘bundle of rights’, although he did not use the metaphor.

\textsuperscript{13} Commissioner of Main Roads v North Shore Gas Co Ltd (1967) 120 CLR 118, 133.

\textsuperscript{14} For the elements of an easement see, \textit{Re Ellenborough Park} [1956] Ch 131, 140.


\textsuperscript{16} See, eg, an access agreement under the \textit{Petroleum and Gas (Production and Safety) Act 2004} (Qld) s 507 or the \textit{Geothermal Energy Act 2010} (Qld) s 225.

\textsuperscript{17} See, eg, a tree plantation agreement under the \textit{Tree Plantation Agreements Act 2003} (WA) pt 2.

\textsuperscript{18} See, eg, development obligations under an infrastructure agreement made under the \textit{Sustainable Planning Act 2009} (Qld) s 663(1).

\textsuperscript{19} See, eg, \textit{Petroleum and Gas (Production and Safety) Act 2004} (Qld) s 507, relating to access agreements.
from a party’ to the covenant,20 or ‘the owner of the land from time to time’.21 To ensure that third parties have ‘record notice’ of the rights and obligations,22 the statutes typically provide that the agreements bind the third parties on and from their recording or registration.23 A few statutes make the agreements operate in rem without precondition as to registration.24

In creating new classes of rights in land by use of statutory agreements, legislators have paid insufficient attention to the control of measurement costs. The term is used broadly here to include not only the cost to third parties of gathering data about the rights (information costs), but also the cost of processing the data to assess the nature, scope and effect of the rights. The argument draws upon the scholarship of property and communication, which analyses rules of property law as involving communications to various audiences about claims to assets.25

The article begins by evaluating the nature and causes of measurement costs, and the mechanisms by which property law has conventionally controlled them. The principal mechanisms are the Grundnorm known as the numeros clausus (‘closed list’) which limits the classes of property rights to a few well-defined forms, and the rules (‘limiting rules’) developed by common law and equity to restrict the burdens that covenants may create as rights in rem. Both mechanisms have come under sustained academic criticism in recent years, and are no longer accepted by legislators as constraining the creation of new property rights. The use of the statutory agreement will be traced from its origin in equity’s restrictive covenant, through its development into a tool of negotiated regulation, and finally to its contemporary form of an agreement between private parties given in rem operation, free of the limiting rules. Legislative inadvertence to the measurement costs of statutory agreements is illustrated by an examination of the provisions for the carbon right and associated carbon covenant in the Carbon Rights Act 2003 (WA).

20 See Climate Change Act 2010 (Vic) s 33; Planning and Environment Act 1987 (Vic) s 182(6); Land Use Planning and Approvals Act 1993 (Tas) s 79.
21 See Environmental Planning and Assessment Act 1979 (NSW) s 93H(3).
23 See, eg, the Climate Change Act 2010 (Vic) s 31(2) which provides that a Forestry and Carbon Management Agreement is binding on the parties and any person who has consented to it. Section 33 provides that on and from its recording in the Register, the obligations in the agreement run with the land and ‘are binding on any person who derives title to an estate or interest in the land from a party to the agreement’.
24 Examples of agreements given in rem operation without recording or registration are access agreements under the Petroleum and Gas (Production and Safety) Act 2004 (Qld) ss 502–7, and the Greenhouse Gas Storage Act 2009 (Qld) ss 286–92. Although not required to be recorded, the agreements are expressly excepted from the indefeasibility provisions in the Land Title Act 1994 (Qld) ss 184(1), 184(3)(a), 185(1)(b), (i).
II MEASUREMENT COSTS, THE NUMERUS CLAUSUS AND LIMITING RULES

A Why Measurement Costs Matter

Coase's article, ‘The Problem of Social Cost’, drew attention to the role that transaction costs play in impairing the efficiency of markets in allocating resources to higher value uses.\(^{26}\) Although Coase failed to define ‘transaction costs’, property rights scholars generally agree that the term includes information costs incurred prior to entry into the transaction.\(^ {27}\) For prospective buyers, information costs are incurred in two stages. First, buyers scan the market to gather information about the range of items offered for sale, and select one or more for closer appraisal. Secondly, they assess the attributes of the short-listed items to measure their suitability and value.\(^ {28}\) Both stages require the evaluation of information.

Barzel was the first property rights scholar to show that measurement costs significantly affect market transactions.\(^ {29}\) The precondition for a market exchange is that a buyer values an item offered for sale more highly than the seller.\(^ {30}\) To value the item, the buyer needs to assess (measure) its attributes in comparison with other items on the short-list. Some items are difficult (that is, costly) for purchasers to measure because their attributes are not patent. Without legal safeguards, sellers may exploit their superior knowledge to induce buyers to make measurement errors to the sellers' advantage.\(^ {31}\) The total cost of a traded item to buyers includes the measurement cost for all items short-listed, not just the one finally purchased.\(^ {32}\) Barzel hypothesises that as measurement costs increase, the net price that buyers will pay for a traded item falls.\(^ {33}\) Vendors can be expected to deploy countermeasures to reduce buyer uncertainty, such as product warranties and standardising product specifications through the use of brands.\(^ {34}\)

27 Douglas W Allen, ‘Transaction Costs’ in Boudewijn Bouckaert and Gerrit de Geest (eds), Encyclopaedia of Law and Economics (Edward Elgar, 2000) vol 1, 893, 898. The narrower view that transaction costs are incurred only when a market exchange occurs is preferred by neoclassical economists, who seek to address a different set of questions: at 903–5.
28 Rudden, above n 6, 254–5.
31 Allen, above n 27, 912. 13.
33 Ibid.
34 Ibid 36 8, 48.
B Standardisation of Property Rights: The Numerus Clausus Principle

In providing for a growing range of new statutory rights which are largely defined by contract, legislators are expanding a traditionally limited list of property rights, known in civil law systems as the *numerus clausus*. Bernard Rudden observes that all modern legal systems recognise only a limited class of less than a dozen classes of real property right, which he groups into three functional categories: rights to present or future possession, security interests, and ‘servitudes’ (non-possessory, non-security real rights). He finds that although uncodified common law systems lack an explicit *numerus clausus* doctrine, English and American courts have consistently refused to allow parties to create new types of property rights by contract. For example, in *Keppell v Bailey*, Lord Brougham LC said: ‘it must not … be supposed that incidents of a novel kind can be devised and attached to property at the fancy or caprice of any owner’. As Rudden puts it: ‘the creation of real rights: “fancies” are for contract, not property.’

Prior to Rudden’s article, there was little express recognition that the *numerus clausus* principle had any relevance to common law systems. Since Rudden’s article, the operation of the principle in common law systems is widely recognised, and its function debated. Commentators agree that it operates as a constraint on freedom of transaction and on judicial innovation in the categories of property, but does not constrain the power of legislatures to introduce new classes of property. On the contrary, it reserves that power for the legislative branch. Merrill and Smith described it as ‘a norm of judicial self-governance … [that] functions in the common law much like a canon of interpretation … or like a strong default rule in the interpretation of property rights’. Edgeworth described it as ‘a metaprinciple or higher order norm’ which influences the development of more specific rules of property law.

The question that is presently relevant is whether the *numerus clausus* principle contains useful lessons for legislators. Rudden examines a number of possible

35 Rudden, above n 6, 241–4.
36 Ibid 244–5 nn 12–19. The recognition of the restrictive covenant in the mid-19th century was a rare departure.
38 Rudden, above n 6, 243.
40 Merrill and Smith, ‘Optimal Standardization’, above n 39, 11.
41 Edgeworth, above n 37, 391.
rationales, which he groups under the headings of legal, philosophical and economic.42 Traditional legal concerns are first, a belief that the existing list of real rights is optimal; second, the difficulties for purchasers in discovering the existence of ‘fancies’ (novel and idiosyncratic property rights); third, the absence of consent by third parties to affirmative obligations running with land; and fourth, the over-encumbering of land with too many obligations and restrictions.43

Turning to the philosophical rationales, Rudden takes from Kant the proposition that as property rights are enforceable against all, new obligations should be imposed only by a general norm and not by an expression of individual will.44 Hegel contributes the concept that because feudalism attached service obligations to land tenure, the standardisation of property rights was part of the anti-feudal quest for personal freedom.45 Based on Hohfeld, Rudden draws the principle that one person should not be able to alter the legal position of another person without the latter’s consent unless the alteration is for the better.46 If A is able to grant to B a new type of property right that binds C, C’s legal position is altered because C now owes B, a new claimant, a duty not to do anything that would breach the right.47

The economic rationales considered by Rudden include the following: first, allowing fancies to proliferate may impair the marketability of land; second, standardisation of property rights reduces transaction costs of market exchange, in particular by reducing purchasers’ information costs at the stage of scanning the market prior to initial selection (‘screening costs’); third, fancies may impair the efficient utilisation of land or even sterilize it; and fourth, the durability of real rights means that they last much longer than contractual rights and can be costly to terminate due to strategic bargaining problems.48

Drawing upon economic conceptions of transaction costs, Rudden suggests that the numeros clausus principle may reduce screening (search) costs by limiting the range of rights that purchasers must consider. Although he does not separately identify measurement costs, Rudden’s ‘transaction costs’ include the purchaser’s assessment of the attributes of the right offered.49 He concludes that, while the vendor or lessor may seek to attach non-standard ‘fancies’ to the right through contract, ‘few sellers and lessors are likely to try fancies on them if they cannot feature as standard elements in a deal of that sort’.50

42 Rudden, above n 6, 245–63.
43 Ibid 249.
44 Ibid 249, citing Immanuel Kant, Philosophy of Law (W Hastie trans, Clark, 1887) i.14 [trans of: Metaphysische Anfangsgründe der Rechtslehre (first published 1797)].
45 Rudden, above n 6, 250, citing G W F Hegel, Philosophy of Right (TM Knox trans, Oxford University Press, 1942), 41, 44, 62, 217 [trans of: Grundlinien der Philosophie des Rechts (first published 1820)].
46 Rudden, above n 6, 250–1; Wesley Newcomb Hohfeld, ‘Some Fundamental Legal Conceptions as Applied in Judicial Reasoning’ (1913) 23 Yale Law Journal 16.
47 Rudden, above n 6, 250–2.
48 Ibid 252 60.
49 Ibid 254 7.
50 Ibid 256.
Rudden questions the utility of the *numerus clausus* principle, in an era when efficient registration systems lower the information costs of new rights, and parties find ways around the restrictions by creative drafting.\(^5\) He concludes that if economic theory does not supply a justification, the case for the *numerus clausus* depends upon a philosophic choice between the freedom from transaction described by Kant, Hegel and Hohfeld, and the freedom of landowners to create new property rights and to maximise the exploitation of property.\(^5\)

**C The Limiting Rules**

One of Rudden’s important insights was that the legal, economic and philosophic concerns underlie not only the *numerus clausus* principle, but also related property law doctrines which limit the freedom of parties to create novel property rights (‘limiting rules’). These include the rule that easements and covenants cannot exist in gross but must be for the benefit of the holder’s land;\(^5\) that a leasehold or freehold covenant running with land must ‘touch and concern’ the land (or similar phrases);\(^5\) and the rule that prevents positive obligations running with freehold estates.\(^5\) Versions of these rules are found in both common law and civil law systems, suggesting that they respond to common concerns. Rudden hypothesises that the rule against attaching positive obligations to land is a response to legal and philosophic concerns about binding successors to obligations to which they did not consent.\(^5\) The rule against easements and covenants in gross reflects economic concerns about the efficient utilisation of land, by permitting only those value-enhancing servitudes which benefit other land.\(^5\) The ‘touch and concern’ rule also recognises the absence of consent by successors, while at the same time restricting ‘fancies’ that do not enhance the value of the covenantee’s land.\(^5\)

There has been academic controversy in recent years about the functional value of the limiting rules. As part of its project to develop the *Third Restatement on Property: Servitudes*, the American Law Institute invited comment from American academics on whether the limiting rules should be relaxed in relation

\(^{14}\) Ibid 260 3.
\(^{52}\) Ibid.
\(^{53}\) A restrictive covenant must be given for the benefit of other land owned by the covenantee (except under the building scheme doctrine: *London County Council v Allen* [1914] 3 KB 642; *Re Mack and the Conveyancing Act* [1975] 2 NSWLR 623, 626; *Adrian J Bradbrook and Susan V MacCallum, Bradbrook and Nave’s Easements and Restrictive Covenants* (LexisNexis Butterworths, 3rd ed, 2011) 383–4 [14.30] [14.31]. An easement, other than special statutory easements in gross, requires a dominant tenement: *Re Ellenborough Park* [1956] Ch 131. This may consist wholly or partly of an incorporeal right: *Bradbrook and MacCallum*, above n 53, 11–14 [1.14]–[1.18].
\(^{54}\) *Spencer’s Case* (1583) 5 Co Rep 16a; 77 ER 72 (leasehold covenants); *Rogers v Hosegood* [1900] 2 Ch 388; *Bradbrook and MacCallum*, above n 53, 384–9 [14.32]–[14.39] (restrictive covenants). The ‘touch and concern’ test is mirrored by the requirement in *Re Ellenborough Park* [1956] Ch 131, 140 that an easement ‘must accommodate the dominant tenement’, which excludes rights that confer a mere personal benefit.
\(^{55}\) *Austerberry v Corporation of Oldham* (1885) 29 Ch D 750; *Rhone v Stephens* [1994] 2 AC 310, 321.
\(^{56}\) Rudden, above n 6, 252.
\(^{57}\) Ibid 257.
\(^{58}\) Ibid 246 8, 252, 257.
to easements and covenants. Reichman argued that the limiting rules represent the law’s attempt to balance two competing freedoms: the landowner’s ‘freedom to transact’, and the interests of other parties in ‘freedom from transaction’, or the protection from the over-encumbering of property. Epstein challenged the need for the law to limit freedom of transaction to protect the freedom of others. He argued that any impairment of land value to future owners will be reflected in the value of the burdened land and will be factored into the price of the servitude. If a vendor insists on an onerous servitude running with the land, the market value of the property will fall to a price at which it attracts purchasers despite the covenant. He concludes that future owners are entitled only to ‘record notice’ through the register of servitudes burdening the land at the time they acquire it. Apart from a requirement to give notice on the public record, ‘freedom of contract should control’.

In its Third Restatement, the American Law Institute adopted Epstein’s view that the touch and concern test for servitudes should be abandoned. A contrary view was adopted by the English Law Commission, which recommended in 2011 that positive ‘land obligations’ serving specified functions should be allowed to run with land, subject to retention of the touch and concern test as an essential safeguard. The Commission regards the test as a ‘robust control mechanism’ to prevent the overburdening of land with covenants, particularly those which impose positive obligations on successors. It filters out covenants that confer only a personal benefit on the covenantee, while allowing covenants which contribute to the utility or amenity of land. For example, the test would allow ‘an obligation to mend a fence but not an obligation to walk the covenantee’s dog’.

62 Ibid 1360.
64 Epstein, ‘Notice and Freedom of Contract’, above n 22, 1354–8
65 Ibid 1358.
66 American Law Institute, Restatement (Third) Property (Servitudes) (2000) §3.2. The Restatement is designed to act as a guide to judges and legislators.
68 Ibid 110 [5.60], 112–3 [5.69].
69 Ibid 108 [5.51].
70 Ibid 20 [2.42], 108 [5.51].
71 Ibid 107 [5.50].
D The Numerus Clausus as a Device for Controlling Measurement Costs

One of the more influential theories about the purpose of the \textit{numerus clausus} principle is advanced by Merrill and Smith, who depict it as a coordination device to control measurement costs.\textsuperscript{72} The authors observe that it is not only the prospective purchasers who need to acquire information about property rights relating to an asset. As rights in rem are enforceable against all, they impose a duty on everyone else not to trespass upon them. Therefore a wide class of third persons may need to assess the rights, either to acquire them or to avoid liability for infringing them.\textsuperscript{73} If the law imposed no constraint, some transacting parties would create idiosyncratic and variable rights which would be difficult and costly for third parties to assess.\textsuperscript{74} By standardising the classes of property, the \textit{numerus clausus} principle controls the measurement costs externality that the transacting parties might otherwise create for others.\textsuperscript{75} Parties enjoy freedom of contract and can add additional terms, but they must structure their transactions using the standard ‘building blocks’ of the closed list.\textsuperscript{76}

This analysis extends the economic conception of measurement costs. Barzel, like many economists, regards measurement costs as a problem of incomplete provision of information. Merrill and Smith include the cost to third parties in gathering and processing the information. In their view, use of registration systems may extend the optimal number of standardised property rights in the closed list,\textsuperscript{77} but cannot control the measurement costs of unusual rights that deviate from the recognised types. Even if the rights are recorded on the land register, ‘notice of idiosyncratic property rights is costly to process’.\textsuperscript{78} Third parties must measure various attributes, including the extent to which the fancies diverge from the standard types.\textsuperscript{79}

Merrill and Smith concede Epstein’s argument that when parties create an unusual right in an asset, the measurement costs that they impose upon future purchasers


\textsuperscript{73} Merrill and Smith, ‘Optimal Standardization’, above n 39, 26. See also Merrill and Smith, ‘What Happened to Property?’ , above n 72, 387.

\textsuperscript{74} Merrill and Smith, ‘Optimal Standardization’, above n 39, 38; Merrill and Smith, ‘What Happened to Property?’ , above n 72, 387. Edgeworth, above n 37, 392–3 refers to this concern, citing Lord Brougham LC in \textit{Keppell v Bailey} (1834) 2 My & K 517, 536; 39 ER 1042, 1049: great detriment would arise and much confusion of rights if parties were allowed to invent new modes of holding and enjoying real property, and to impress upon their lands and tenements a peculiar character, which should follow them into all hands, however remote.

\textsuperscript{75} Merrill and Smith, ‘Optimal Standardization’, above n 39, 26–8; Merrill and Smith, ‘What Happened to Property?’ , above n 72, 387.

\textsuperscript{76} Ibid 38–47.

\textsuperscript{77} Ibid 44.

\textsuperscript{78} Ibid 26.
of that asset is not a negative externality.\textsuperscript{80} If the transacting parties can foresee that the existence of the right will raise the costs of dealing with the asset in future, they will factor the additional costs into the price.\textsuperscript{81} The authors contend that the creation of a new type of property right increases the measurements costs of other similar assets, because of the possibility that an asset may be subject to such a right.\textsuperscript{82} Parties who devise new types of property right cannot be expected to take account of the measurement costs that result for persons dealing in other assets.\textsuperscript{83} The \textit{numerus clausus} principle can be understood as a legal device for controlling that externality.\textsuperscript{84} By standardising the types and characteristics of property rights, the principle reduces measurement costs, but at the cost of frustrating individual choice. For Merrill and Smith, the issue for legal systems is determining the optimal degree of standardisation of property rights that balances measurement costs and the ‘frustration costs’ of inflexibility.\textsuperscript{85}

In a later article, Smith further expands upon the proposition that unusual property rights increase the cost of processing information.\textsuperscript{86} His analysis draws upon the emerging scholarship of property and communication, which holds that certain rules of property law are shaped by their function as modes of communication to varying audiences.\textsuperscript{87} Smith highlights the role of ‘processing costs’, a form of transaction cost that represent difficulties ‘on the processor’s or receiver’s end’ which can impede communication about the right.\textsuperscript{88} Idiosyncratic rights, variably defined by agreements, are much more information-intensive to process than rights that conform to a standard pattern.\textsuperscript{89} The law allows idiosyncratic contractual terms because only the parties are bound by them.\textsuperscript{90} As rights in rem are good against all, information about the rights must be processed not just by those wishing to enforce or acquire them, but also by everyone who is under a duty to respect them. He argues: ‘If everyone in the world is expected to respect an owner’s right to Blackacre, the content of that right cannot be too complicated or idiosyncratic without placing a large burden on many third parties’.\textsuperscript{91}

\textsuperscript{82} Merrill and Smith, ‘Optimal Standardization’, above n 39, 6, 25–34.
\textsuperscript{83} Ibid 26–8.
\textsuperscript{84} Ibid 25–6.
\textsuperscript{85} Ibid 68.
\textsuperscript{87} For example, Carol Rose explained the importance of possession in property law in terms of its value in signalling to an intended audience the existence of a proprietary claim: Carol M Rose, ‘Possession as the Origin of Property’ (1985) 52 \textit{University of Chicago Law Review} 73, 73–80.
\textsuperscript{88} Smith, ‘The Language of Property’, above n 86, 1108–19.
\textsuperscript{89} Ibid 1109–10.
\textsuperscript{90} Ibid 1110–11.
\textsuperscript{91} Ibid 1108.
view, the *numerus clausus* principle reflects an implicit judicial recognition that it is costly to communicate intensive information to wide and diverse audiences.\(^2\)

### D Judicial Concern over Measurement Costs

Australian courts have recently become concerned about the measurement costs of individually worded grants, even within an established class of property right. In *Westfield Management Ltd v Perpetual Trustee Co Ltd*,\(^3\) the High Court considered the question of whether extrinsic evidence could be admitted in order to resolve doubt as to the meaning of words in a registered easement. The Court ruled that evidence could not be admitted to prove the intention of the parties or the circumstances in their contemplation at the time the easement was granted.\(^4\) Prior to *Westfield*, circumstances existing at the time of the grant could be taken into account in construing instruments of easement to the same extent as for contracts.\(^5\)

In its joint judgment, the High Court said in *Westfield* that ‘rules of evidence assisting the construction of contracts *inter partes*, of the nature explained by authorities such as *Codelfa Construction Pty Ltd v State Rail Authority (NSW)*, did not apply to the construction of the Easement’.\(^6\) The Court explained that the rules were not consistent with the Torrens principle of a public register which provided details of dealings affecting land.\(^7\)

The third party who inspects the Register cannot be expected, consistently with the scheme of the Torrens system, to look further for extrinsic material which might establish facts or circumstances existing at the time of the creation of the registered dealing …\(^8\)

The *Westfield* case concerned a registered easement, and in its reasons the Court emphasised the importance of the principle of indefeasibility in reducing purchasers’ burden of inquiry.\(^9\) On one view, the *Westfield* ruling applies only to the construction of registered instruments that confer an indefeasible interest. In subsequent cases, courts have taken a broader view, based on the principle that a purchaser should not be expected to make inquiries beyond the register. Although restrictive covenants are recorded or registered without indefeasibility

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\(^2\) Ibid 1157–8.
\(^3\) (2007) 233 CLR 528 (‘*Westfield*’).
\(^4\) Ibid 538–41 [35]–[45].
\(^5\) Ibid 539–41 [39]–[45]. This approach drew support from remarks of McHugh J in *Gallagher v Rainbow* (1994) 179 CLR 624, 639–40, but the High Court in *Westfield* said that his Honour’s remarks were ‘too widely expressed’: *Westfield* (2007) 233 CLR 528, 539 [39].
\(^6\) *Westfield* (2007) 233 CLR 528, 539 [37] (citations omitted). In *Codelfa Construction Pty Ltd v State Rail Authority of NSW* (1982) 149 CLR 337, Mason J said that in construing a contract ‘evidence of surrounding circumstances is admissible to assist in the interpretation of the contract if the language is ambiguous or susceptible of more than one meaning’: at 352.
\(^7\) *Westfield* (2007) 233 CLR 528, 539 [37]–[39].
\(^8\) Ibid 539 [39].
\(^9\) Ibid 539 [37]–[39].
in New South Wales, Victoria, Western Australia and Tasmania, judges in the first three states have taken the ruling in Westfield to apply to the interpretation of recorded restrictive covenants as well as easements. In Ryan v Sutherland, Black J stated that 'a restrictive covenant will not be construed by reference to material extrinsic to the register' in Prowse v Johnstone, Cavanough J noted that the full implications of Westfield were unsettled, but did not take the High Court to mean that the principle restricting the use of extrinsic material was confined to easements. In Miller v Evans, Hall J appears to have taken the view that the reasoning in Westfield applies to an instrument such as a restrictive covenant that is intended to be registered.

The Westfield line of authorities shows the courts apply different approaches to the construction of contracts and dispositions of property recorded in the register. The departure from Codelfa demonstrates judicial recognition of the distinctive nature of property as a right enforceable against third parties. The measurement costs for third parties are higher if the construction of covenants depends on factual circumstances existing at the time the covenant was created. The measurement costs are correspondingly lower if third parties can assess the property right by reference only to information found on the register.

III CONTRACTARIAN APPROACHES TO DEFINING NEW PROPERTY

A The Economic View of Property

The contributions of Merrill and Smith highlight the different closure rules of contract and property. Contract law allows parties a wide freedom to agree on any terms they wish, unless they transgress a legislative provision or common law rule. The closure rule for property law is just the opposite. Parties are not free to create ‘fancies’ but must choose from the limited menu of recognised types.

Economic conceptions of property do not recognise this fundamental difference between contract and property. It is widely understood that property has a different meaning in law and economics. Cole and Grossman note that while economists regard secure and well-defined property rights as essential to the functioning of

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100 Transfer of Land Act 1958 (Vic) ss 88(1), (3), 42(1); Conveyancing Act 1919 (NSW) s 88(3), Real Property Act 1900 (NSW) s 42(1); Transfer of Land Act 1893 (WA) ss 68(1), 129A, pt 4A; Land Titles Act 1960 (Tas) ss 40(1), 102.
102 [2012] VSC 4 (11 January 2012) [57].
103 [2010] WASC 127 (9 June 2010) [15]–[20].
104 The High Court in Westfield allowed that, in the absence of contrary argument, evidence could be admitted to establish the meaning of terms and expressions used in the Register: (2007) 233 CLR 528, 540[44]. As to what other evidence may or may not be admitted, see Michael Weir, 'The Westfield Case: a Change for the Better?' (2009) 21 Bond Law Review 182, 187–93.
105 Rudden, above n 6, 243–4 nn 9–18.
106 See eg, Hamilton and Bankes, above n 25, 31; Rudden, above n 6, 261–3.
markets, there is ‘no consensus … about what property rights are. Economists
define them variously and inconsistently, sometimes in ways that deviate from
the conventional understandings of legal scholars and judges’. Legal conceptions
of property are relational, and it is this approach which is most firmly established
in American jurisprudence. If I have a property right in a thing, other persons
must have a corresponding duty not to interfere with the exercise of my right.
By contrast, the dominant conception of property in economics regards use rights
or control of assets as a property right, whether or not correlative duties are
imposed on others.

In their article, ‘What Happened to Property in Law and Economics?’, Merrill
and Smith argue that the economic understanding of property overlooks its
distinctive character as a ‘right to a thing, good against the world’. The ‘bundle
of rights’ conception of property that it is dominant in economics reduces
property to an arbitrary collection of use rights or ‘entitlements’, which they
describe as an assumption that ‘property consists of an ad hoc collection of rights
in resources’. The institution of property becomes ‘a device for allocating use
rights rather than [a right in] a thing’. While emphasising the need for property
rights to be well-defined, Coasean economics regards property as a baseline on
which value-maximising exchange can occur. It is assumed that parties are free
to arrange or to rearrange the set of use rights that comprise their bundle of rights.
This ‘contractarian’ account of property is at odds with the legal conception
of property rights as comprising a closed list of standard forms. Because
economists view property as use rights without correlative duties, they fail to take
account of the measurement costs that customised property rights impose on a
wide class of duty-holders.

It would be an oversimplification to conclude that all economists subscribe to
the contractarian view of property while lawyers favour standardisation through

108 Ibid 318, showing that the relational theory, developed and articulated by Hohfeld, above n 46, dates
back to the 1870s, citing Oliver W Holmes, ‘The Arrangement of the Law: Privity’ (1872) 7 American
Law Review 46; Shadworth H Hodgson, The Theory of Practice (Longmans, 1870).
109 Cole and Grossman, above n 107, 319.
110 Ibid 318–22; Allen, above n 27, 897–8 (defining a property right as ‘the ability to freely exercise a
choice over a good or service’).
111 Merrill and Smith, ‘What Happened to Property?’, above n 72, 358, quoting J E Penner, The Idea
112 Ibid 376.
113 Arruhada explains that economists’ conception of property reflects their concern with the conversion
of resources from open access to private property and the problem of externalities, while lawyers are more
concerned with the rules for transactions: Benito Arruhada, Institutional Foundations of Impersonal
Barzel says that legal rights, the major function of which is third party enforcement, are ‘neither
necessary nor sufficient’ for economic rights: Yoram Barzel, Economic Analysis of Property Rights
114 Merrill and Smith, ‘What Happened to Property?’, above n 72, 359.
retention of the *numerus clausus* and the limiting rules.\textsuperscript{116} The contractarian approach enjoys considerable support among lawyers and legal scholars, as evidenced by support for proposals to relax the limiting rules in the law of easements and covenants.\textsuperscript{117} At the same time, it is widely recognised that the existing list of property rights may not be adequate for present and future needs.\textsuperscript{118} Some property law scholars advocate a cautious advance, in which legislative expansion in the categories of property would proceed incrementally and with due regard to the values which the *numerus clausus* serves. According to Barton, the values include maintaining the formal coherence of the law, justice in relationships between parties, and control of information costs.\textsuperscript{119} Edgeworth proposes a cost-benefit approach, arguing that novel property rights can be accommodated "as long as [they] can be particularised with reasonable precision" and recorded on land registers to limit information costs.\textsuperscript{120}

### B Approaches to Expanding the Classes of Property

Policymakers frequently underestimate the complexity of particularising new property rights with reasonable precision. The common law rules and legislative reforms that shape and regulate the traditional classes of property are the work of centuries. The introduction of a wholly new class of property right requires considerable intellectual effort to fully define the incidents, the mode of dealing with the right, and its relationship to other property rights. For example, the recognition of native title by a High Court decision in 1992 created a need for a legislative framework for making determinations of native title.\textsuperscript{121} Persons dealing with land wanted to know if it was subject to existing native title rights, and what liabilities they might incur for infringing the rights.\textsuperscript{122} Numerous judicial decisions, legislative reforms and academic treatises have contributed to conceptualising and particularising native title, and the process is ongoing.

Four main approaches are used by legislative drafters to create new property rights:

1. Assimilation;
2. Analogy;


\textsuperscript{118} Maguire and Phillips, above n 3, 222.

\textsuperscript{119} Barton, above n 4, 97–9.

\textsuperscript{120} Edgeworth, above n 37, 407.

\textsuperscript{121} *Mabo v Queensland [No 2]* (1992) 175 CLR 1. Native title had precursors in other common law jurisdictions, but was novel in Australian law. The *Native Title Act 1993* (Cth) preserved the common law definition, and created processes for making determinations.

\textsuperscript{122} In *Wik Peoples v Queensland* (1996) 175 CLR 1, Gummow J commented that:

> The content of native title, its nature and incidents, will vary from one case to another. It may comprise what are classified as personal or communal usufructuary rights involving access to the area of land in question to hunt for or gather food, or to perform traditional ceremonies: at 169.
3. Full statutory specification as a new class of right; and


The first approach is to create new statutory rights by equating them with an existing common law class, subject to statutory modifications. The extension of an existing class imports a set of ready-made rules, but can lead to incoherence if the new right does not fit.\textsuperscript{123} For example, commentators have criticised provisions in state legislation such as the Conveyancing Act 1919 (NSW) s 88AB, which deems a forestry right (including a carbon sequestration right) to be a \textit{profit à prendre}.\textsuperscript{124} The analogy is poor because a \textit{profit à prendre} is a right to remove something from the land while the purpose of a carbon sequestration right is to maintain a carbon sink on land.\textsuperscript{125} To the extent that new statutory rights depart from the existing forms, it becomes more difficult for judicially created rules to fill in the gaps in the statutory scheme. In any case, reliance on judicial decisions to supply rules inflates measurement and enforcement costs. As Parry remarks:

  
  if the incidents of the new property rights are not statutorily defined, it will take a long time for the common law to develop jurisprudence … In the meantime, the scope of the rights will be uncertain …\textsuperscript{126}

The second approach is to specify the new right by analogy with a conventional class of right, so that the rules applicable to that right are adopted. Care is needed to ensure that the analogy is apt, and that the rules adopted are suitable. An example of the perils of a poor analogy is the Victorian Conservation Trust Act 1972 (Vic) s 3A(11), which provides that a covenant made between the Trust and a landowner and recorded in the Register is enforceable by the Trust against persons deriving title from the landowner ‘as if it were a restrictive covenant even though it may be positive in nature or that it is not for the benefit of land of the Trust’. Noting that the provision indirectly applies rules that are not suited to the nature of the statutory covenants, the Victorian Law Reform Commission observed that such provisions improperly ‘seek to equate a statutory agreement with something it is not’.\textsuperscript{127}

\begin{itemize}
\item \textsuperscript{123} Hamilton and Bankes, above n 25, refer to ‘tortuous efforts to shoe-horn innovative interests into an existing category of property’: at 45.
\item \textsuperscript{124} A similar method is used in the Forestry Rights Registration Act 1990 (Tas) ss 3, 5 and the Forestry Act 1939 (Qld) s 611, sch 3.
\item \textsuperscript{126} Parry, above n 125, 341.
\end{itemize}
The third approach is to constitute the new right as a sui generis right, a novel statutory form with its own rule set. This approach has been advocated by commentators because the greater visibility of legislative rules tends to reduce information costs. Legislated rules, according to Merrill and Smith, are preferable to common law rules because they are more visible and accessible in a single authoritative text, their scope of application is more certain, and their content is more stable.

While a fully elaborated statutory scheme is ideal, examples are rare due to the difficulty of the task. Australian legislators are increasingly resorting to a fourth approach, in which the rights are only partly defined and specified by the statute, and their content is otherwise regulated by individualised statutory agreements.

IV THE DEVELOPMENT OF THE TULK v MOXHAY COVENANTS AS A TOOL OF REGULATION

The legislative technique of providing for the creation of property rights by statutory agreement developed by analogy with a particular class of property right, the restrictive covenant. This mid-19th century judicial extension to the categories of property was cited by Rudden as a rare departure from the *numerus clausus* principle, although one which had precursors. In *Tulk v Moxhay*, the Court of Chancery allowed a contractual covenant to run with land and bind successors who took with notice of it. By the early 1880s, equity developed ‘limiting rules’ which restricted the scope of covenants that could be enforced against third parties. First, the covenant must be restrictive in substance. It may restrict the use of land but cannot impose any positive obligation on the landowner.

131 This method is proposed by Steven A Kennett, Arlene J Kwasniak and Alastair R Lucas, ‘Property Rights and the Legal Framework for Carbon Sequestration on Agricultural Land’ (2005–2006) 37 *Ottawa Law Review* 171, 193. See Petroleum and Gas (Production and Safety Act) 2004 (Qld), which in s 24A provides for a land access code to prescribe mandatory conditions concerning the conduct of authorised activities on private land. Section 533(2) renders a conduct and compensation agreement unenforceable to the extent it is inconsistent with the Act or the land access code.
133 (1848) 2 Ph 774; 41 ER 1143.
such as the payment of money.\textsuperscript{134} Second, it cannot exist in gross, but must be for the benefit of the covenantee’s land or a business conducted on the land.\textsuperscript{135}

Victoria, New South Wales, Tasmania and Western Australia empower the registrar to record a notified restrictive covenant on the folio or certificate of title for the burdened land. The effect is that purchasers cannot rely on the indefeasibility of registered title to defeat the covenant because the registered owner holds the land subject to interests and encumbrances recorded on the title.\textsuperscript{136} The Northern Territory is the only Australian jurisdiction to provide for registration of both positive and restrictive covenants, including covenants created by private parties.\textsuperscript{137}

The use of covenants or agreements between landowners and public authorities to achieve statutory objectives is a relatively recent development. Collaborative governance models in public administration have seen a transformational shift away from top-down, prescriptive ‘command and control’ approaches,\textsuperscript{138} towards an emphasis on negotiation, collaboration and consensus-building to achieve outcomes.\textsuperscript{139} In environmental regulation, Dana describes a ‘new contractarian paradigm’ which gives central importance to negotiation of assent to site-specific requirements, with statutory powers used as a backup mechanism in default of agreement.\textsuperscript{140} As well as reducing enforcement costs, negotiated agreements can secure public benefits that might not be obtainable by an exercise of statutory powers.

For the contracts to secure environmental values over an extended time frame, it is necessary to make them binding on the landowner’s successors. The restrictive covenant provides a model for imposing in rem burdens operating in property law, but its limiting rules are unsuitable for some statutory purposes. To achieve environmental objectives, it may be necessary for landowners to assume positive obligations such as the control of weeds and pests. And agreements between


135 London County Council v Allen [1914] 3 KB 642; Newton Abbot Co-operative Society Ltd v Williamson & Treadgold Ltd [1952] Ch 286. The building scheme doctrine is an exception: Elliston v Reacher [1908] 2 Ch 374; Bradbrook et al, above n 134, 890 [18.115].

136 Transfer of Land Act 1938 (Vic) ss 88(1), (3), 42(1); Conveyancing Act 1919 (NSW) s 88(3), Real Property Act 1900 (NSW) s 42(1); Transfer of Land Act 1893 (WA) ss 129A, 68(1); Land Titles Act 1980 (Tas) ss 102, 40(1). Bradbrook et al, above n 134, 195–7 [4.60], 221–3 [4.190]–[4.195].

137 The Northern Territory provides for registration of both positive and restrictive covenants: see, eg, Land Title Act 2000 (NT) ss 106–14.

138 ‘Command and control’ is used by neo-classical economists to describe legislative rules coupled with state administrative enforcement: Godden and Peel, above n 1, 146–77.


regulators need to be agreements in gross because their purpose is to secure public benefits, not to advantage the regulator’s land.

Legislative provision is required to make an agreement between a regulator and a landowner binding on the landowner’s successors, without regard to the limiting rules. Accordingly, the states have enacted legislation to give in rem operation to certain statutory covenants in favour of the Crown, public or local authorities, commonly conceived as covenants in gross.141 Perhaps the most common type of provision is for a registered planning agreement made by a developer or landowner and a planning authority. Planning agreements are used to place restrictions or conditions on the use or development of the land or to achieve other planning objectives.142

The next step in the development of statutory agreements was prompted by free market environmentalism. If new private rights in resources are required as objects of exchange in environmental markets, the agreements that create the rights can be regarded as regulatory instruments.143 It was but a short step to the idea that rights, restrictions and positive duties created by private agreements between landowners and resource investors should bind the landowner’s successors by force of statute.144 A statutory method of regulating a line of future landowners would be placed at the disposal of market participants who, unlike public authorities, were required to consult no interests but their own.

V FORESTRY CARBON COVENANTS

From the 1990s, all Australian states legislated to create property rights in the benefits of carbon sequestered in trees or vegetation on land (‘forestry carbon

141 See, eg, Conveyancing and Law of Property Act 1884 (Tas) ss 90AB; Conveyancing Act 1919 (NSW) ss 88F; Land Title Act 1994 (Qld) ss 97A–97DA; Land Act 1994 (Qld) ch 6 pt 4 div 8A. Examples from Victoria include Cultural Heritage Agreements under the Aboriginal Heritage Act 2006 (Vic) ss 66–77 and various land management agreements under the Catchment and Land Protection Act 1994 (Vic) ss 37–40; Conservation, Forests and Lands Act 1987 (Vic) ss 69–72; Victorian Conservation Trust Act 1972 (Vic) ss 3A.


143 For an example of legislation deeming private restrictive covenants to be ‘regulatory instruments’ for certain purposes, see Environmental Planning and Assessment Act 1979 (NSW) s 28(1).

144 Maguire and Phillips, above n 3, 233 record that the use of covenants for environmental regulation was advocated by a government working party, citing Department of Natural Resources and Mines Statutory Covenants Working Group, ‘Statutory Covenants: Guidelines for Their Use in Queensland’ (Working Group Paper, 2003). Since then, statutory agreements have been incorporated into several resource statutes in Queensland.
Determining whether a particular obligation is incidental to a forestry covenant requires an exercise in statutory interpretation, which may cause uncertainty and add to measurement costs.

145 Conveyancing Act 1919 (NSW) ss 87A, 88AB; Forestry Act 1959 (Qld) s 61J, sch 3; Forest Property Act 2000 (SA) pt 2, ss 3–3A; Forestry Rights Registration Act 1990 (Tas) ss 3, 5; Forestry Rights Act 1996 (Vic) s 3 (since repealed and replaced by the Climate Change Act 2010 (Vic) ss 20–25); Carbon Rights Act 2003 (WA) ss 3, 5–6.

146 Conveyancing Act 1919 (NSW) ss 87A, 88EA (a ‘forestry covenant’); Forestry Act 1959 (Qld) sch 3 (‘natural resource products’); Forest Property Act 2000 (SA) s 7(l) (a ‘forest property agreement’); Forestry Rights Registration Act 1990 (Tas) s 3 (a ‘forestry covenant’); Climate Change Act 2010 (Vic) pt 4 div 3 (a ‘forestry and carbon management agreement’); Carbon Rights Act 2003 (WA) pt 3 (a ‘carbon covenant’).

147 Forestry Act 1959 (Qld) sch 3, s 61J(5) (which deems the agreement to be a profit à prendre for purposes of registration); Forest Property Act 2000 (SA) s 9.

148 Conveyancing Act 1919 (NSW) ss 87A; Carbon Rights Act 2003 (WA) s 12(3); Climate Change Act 2010 (Vic) s 27(1); Forestry Rights Registration Act 1990 (Tas) s 3.

149 Climate Change Act 2010 (Vic) ss 28(2)–(3); Conveyancing Act 1919 (NSW) ss 87A; Forest Property Act 2000 (SA) s 62(l); Forest Property Rights Registration Act 1990 (Tas) s 3; Carbon Rights Act 2003 (WA) s 10C(2); Forestry Act 1959 (Qld) ss 61J(3), (5).

150 Law Commission, above n 67, 108 [5.51].

151 Ibid.

152 A forestry right is deemed to be a profit à prendre: Forestry Rights Registration Act 1990 (Tas) s 5. This is an interest in the land of the covenantee landowner.

153 The Act does not state the matters that can or must be included in a forestry covenant, but the definition of ‘forestry right’ refers to ancillary rights and obligations relating to specified matters: Forestry Rights Registration Act 1990 (Tas) s 3.
A Western Australia’s Carbon Rights and Carbon Covenants

All the state statutes adopt a broadly similar model insofar as they rely upon a registered or recorded agreement to either constitute or supplement the forestry carbon right. The statutes vary in the extent to which the forestry carbon right is defined and specified. The most minimally defined scheme is the Carbon Rights Act 2003 (WA) which, in conjunction with the Transfer of Land Act 1893 (WA) pt 4 div 2A, provides for two new types of interest in land: a registered carbon right and a registered carbon covenant which is ancillary to it. Parallel provisions apply to the tree plantation interest and agreement created under the Tree Plantation Agreements Act 2003 (WA) and the Transfer of Land Act 1893 (WA) pt 4 div 2B.

In the Carbon Rights Act, a ‘carbon right’ is defined by reference to s 6(1)(a), which states only that it is a ‘separate interest in the land’. Section 8(1) states that ‘a proprietor of a carbon right has the legal and commercial benefits and risks of the carbon sequestration and carbon release occurring in or on the land’. A ‘carbon covenant’ can create a right, obligation or restriction in relation to land, and can grant a licence to enter to inspect or remedy a default. The only express limitation on the terms of the covenant is that it must not confer any right of possession. Both the carbon right and the carbon covenant are defined as ‘an interest in land’, a ‘hereditament’ and an ‘encumbrance’. Both can be transferred (but not subdivided), extended, mortgaged, charged, varied and surrendered wholly or partially. They are durable property rights that are not extinguished by a transfer to a new purchaser after a mortgagee’s sale of the subject land.

The Carbon Rights Act contains a number of provisions which make it clear that the carbon right takes its content from a registered carbon covenant which is ancillary to it. Only a proprietor of a carbon right may enter into a carbon covenant with other persons who have an interest in the land. A carbon covenant cannot be registered unless it describes ‘the carbon right in relation to which the proposed carbon covenant is to be created’. On registration, the registered proprietor of the carbon right becomes the proprietor of the carbon covenant and, except to the

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154 The provisions in the Transfer of Land Act 1893 (WA) deal mainly with the formalities for registering various disposals of carbon rights.
155 Carbon Rights Act 2003 (WA) ss 3, 5, 9(1), 12(1) (‘Carbon Rights Act’).
156 Ibid s 3.
157 Ibid ss 3, 8(1).
158 Ibid s 10(2).
159 Ibid s 15(b).
161 Ibid ss 6(1), 12(1).
162 Ibid ss 6(3), 12(4).
163 Procedural requirements for these actions are found in Transfer of Land Act 1893 (WA) pt IV div 2A.
164 Ibid s 110.
165 Carbon Rights Act s 10(1).
166 Ibid s 11(2)(c).
extent the covenant provides otherwise, the benefit of the covenant attaches to the carbon right and runs with it. The proprietor of the carbon covenant must at all times be the proprietor of the carbon right. The Act does not apply the usual limiting rules of equity to the carbon covenant. It expressly provides that a covenant can create positive obligations as well as restrictions in relation to land. There is no requirement that the proprietor of a carbon covenant hold other land that benefits from the covenant, and the Act specifically provides that a carbon covenant has effect even if it has the same proprietor as the burdened land. It appears to be a covenant in gross, except for a strange provision that the carbon covenant ‘benefits, attaches to, and runs with, the relevant carbon right’. The purpose of deeming the covenant to be appurtenant to the carbon right is unclear, but it may have the effect of importing the limiting rule that a covenant must ‘touch and concern’ the ‘benefited land’ which, in this case, is the carbon right.

1 Inadequate Definition of the Carbon Covenant

There are few express limitations on the scope of a carbon covenant. It can be created in relation to "any matter that affects or might affect carbon sequestration or carbon release occurring in relation to the affected land". It cannot give a right to possession. It must be in a form approved by the Registrar for registration, but there is no power to prescribe the content or terms by regulation. Other limitations on the scope of the carbon covenant may be implied from the above provisions or from the scope, subject matter and purpose of the Act. To determine what those implied limitations might be, and whether a particular term of a covenant exceeds them, requires an exercise in statutory interpretation. Implied limits are more costly to assess than express ones, because they require the application of legal skill and judgment. Purchasers may need expert legal advice to determine which provisions in a carbon covenant are within the scope of the Act and therefore ‘run with the burdened land’ by force of s 12(3).

Parry observes that the legislation leaves the nature of the carbon right and covenant inadequately defined. They are clearly real property rights (interests in land), but the terms ‘encumbrance’ and ‘hereditament’ tell us little about their legal character. Neither term is defined in the Carbon Rights Act. The usual

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167 Ibid ss 12(3)(a), (3), (4).
168 Ibid ss 12(3)(b), 14(2). See also Transfer of Land Act 1893 (WA) pt IV div 2A which prevents any dealings in a carbon covenant separately from the carbon right.
169 Carbon Rights Act s 10(2).
170 Ibid s 12(2). See also s 6(2) which makes similar provision for a carbon right.
171 Ibid ss 12(3)(a), 14.
172 Ibid ss 6, 12. See also definition of ‘land’ in Transfer of Land Act 1893 (WA) s 4.
173 Carbon Rights Act s 10(1).
174 Ibid s 15(a).
175 Ibid s 11(2)(a).
176 Parry, above n 125, 339–42.
meaning of ‘hereditament’ is property that can be inherited.\textsuperscript{177} The notes to ss 6 and 12 indicate that the effect of applying the term is to bring the interests within the definition of ‘land’ in s 4 of the \textit{Transfer of Land Act 1893\textsuperscript{(WA)}.\textsuperscript{178}}

According to Butt, an ‘encumbrance’ is a property right held by one person \textit{over the property of another [that] limits the ways in which the other may use or deal with the property}.\textsuperscript{179} Parry observes that this meaning would be inconsistent with s 6(2) of the \textit{Carbon Rights Act\textsuperscript{(WA)}}, which validates a carbon right ‘even if it has the same proprietor as the affected land’. Alternatively, the term may take its meaning from s 4 of the \textit{Transfer of Land Act 1893\textsuperscript{(WA)}}, which defines encumbrance very broadly to include ‘all prior estates interests rights claims and demands … and a dealing that is registered under this Act’.

As Parry observes, the extent of the encumbrance upon the landowner’s title is undefined.\textsuperscript{180} While a carbon right cannot confer a right to possession, there is no specified minimum of rights retained by the grantor. The \textit{numerus clausus} nature of common law normally ensures that servitudes like easements and profits are limited non-possessory rights, and cannot be so extensive as to neutralise or sterilise the servient owner’s rights,\textsuperscript{181} or amount to joint possession.\textsuperscript{182} Carbon covenants may purport to impose very substantial restrictions on the landowner’s use of the land, to ensure that carbon remains sequestered in the forestry carbon pool on the land. Parry comments:

\begin{quote}
The carbon right is defined only negatively, in terms of what it is not, leading to a potential destabilisation of the powers associated with the landowner’s bundle of rights, since the owner of a fee simple might be left with fewer powers than a tenant.\textsuperscript{183}
\end{quote}

\section{The Effect of Registration}

If a provision in a carbon covenant exceeds the implied limits of the \textit{Carbon Rights Act}, the effect of registration must be considered. In the case of a restrictive covenant, s 129A(1) of the \textit{Transfer of Land Act 1893\textsuperscript{(WA)}\textsuperscript{(WA)}} provides that covenants created by an instrument ‘in an approved form’ have effect ‘so far as the law permits’. This wording has been held to import the requirements of the general law, and does not confer indefeasibility.\textsuperscript{184} But as a carbon covenant can create positive obligations as well as restrictions, it is doubtful that it is a ‘restrictive covenant’ to which s 129A(1) applies.

\begin{itemize}
\item[\textsuperscript{177}] Peter Butt (ed), \textit{Concise Australian Legal Dictionary\textsuperscript{(LexisNexis, 4th ed, 2011)} 273.}
\item[\textsuperscript{178}] The implications of this are discussed below.
\item[\textsuperscript{179}] Butt, \textit{Concise Australian Legal Dictionary\textsuperscript{, above n 177, 204.}}
\item[\textsuperscript{180}] Parry, above n 125, 339–41.
\item[\textsuperscript{181}] \textit{Clos Farming Estates Pty Ltd v Easton\textsuperscript{[2002]} NSWCA 389 (9 December 2002) [57]; Parramore v Duggan\textsuperscript{(1995)} 183 CLR 633, 642.}
\item[\textsuperscript{182}] \textit{Copeland v Greenhalph\textsuperscript{[1952]} Ch 488, 498, Cf Wright v Macadam\textsuperscript{[1949]} 2 KB 744; Harada v Registrar of Titles\textsuperscript{[1981]} VR 743.}
\item[\textsuperscript{183}] Parry, above n 125, 340 (citations omitted).
\item[\textsuperscript{184}] \textit{Forestview Nominees Pty Ltd v Perpetual Trustees WA Ltd\textsuperscript{(1998)} 193 CLR 154.}
\end{itemize}
Both the carbon right and the carbon covenant are deemed to be interests in land and are created by registration of an instrument.\textsuperscript{185} They appear to fall within the terms of the indefeasibility provision in s 58 of the \textit{Transfer of Land Act 1893 (WA)} which provides that ‘upon … registration the estate or interest comprised in the instrument shall pass’. Hepburn doubts that the legislation means to confer indefeasibility upon the carbon right or the carbon covenant.\textsuperscript{186} In her view, registration is a formal precondition for the creation of the carbon right and the carbon covenant, and ‘does not guarantee the quality or scope of the carbon right’.\textsuperscript{187} In support of Hepburn’s view, it may be noted that s 129A provides for restrictive covenants to be ‘registered’, but registration does not make them indefeasible.\textsuperscript{188}

Even if the indefeasibility provision does apply, it is not clear that it would validate a purported carbon covenant and carbon right that exceed the limits of the \textit{Carbon Rights Act}. The rights are creations of statute unknown to the common law. The scheme of the Torrens statutes is that interests are registered by reference to cognate types that are already recognised by law.\textsuperscript{189} It is arguable that even a registered interest must possess the core attributes required by law for an interest of the relevant type, including any attributes implied by statute. In \textit{Karacominakis v Big Country Developments Pty Ltd},\textsuperscript{190} Giles JA (with whom Stein and Handley JJA agreed), said that registration cures many invalidating defects in instruments, but identified this significant limitation:

\begin{quote}
Registration does not cure a defective transaction if the instrument itself is ineffective, for example because purporting to create an interest not known to the law … or purporting to grant a lease but void for uncertainty of the term …\textsuperscript{191}
\end{quote}

3 \textbf{Inadequate Definition of Carbon Rights Mortgage}

The Western Australian legislation impliedly creates another new kind of right which it leaves inadequately defined and specified. The \textit{Transfer of Land Act 1893 (WA)} contains procedural requirements for registration of a mortgage of a carbon right and its associated carbon covenant, which are expressed to be additional to the requirements for a mortgage of land in pt IV div 3.\textsuperscript{192} The legislation does not expressly provide for such mortgages, but authorises them indirectly by extending

\begin{footnotesize}
\begin{enumerate}
\item[185] \textit{Carbon Rights Act 2003 (WA)} ss 6, 12.
\item[186] Hepburn, above n 125, 251.
\item[187] Ibid.
\item[188] \textit{Forestview Nominees Pty Ltd v Perpetual Trustees WA Ltd} (1998) 193 CLR 154.
\item[190] [2000] NSWCA 313 (17 November 2000).
\item[191] Ibid [52]. In \textit{Re Ridgeway and Smith’s Contract} [1930] VLR 111, an easement purportedly created by registered transfer created no interest, as there was no dominant tenement. See also \textit{Clos Farming Estates Pty Ltd v Easton} [2002] NSWCA 389 (9 December 2002) (a registered plan that purported to create an easement created no valid interest). Note that courts have held that registration can confer a valid interest notwithstanding an invalidating defect such as forgery, alteration after signature etc: Peter Butt, \textit{Land Law} (Thomson Reuters, 6th ed, 2010) 755 [20.19].
\item[192] \textit{Transfer of Land Act 1893 (WA)} ss 104E, 104K. See parallel provision for mortgage of a tree plantation interest in s 104R.
\end{enumerate}
\end{footnotesize}
definitions. Section 105(1) of the *Transfer of Land Act 1893* (WA) provides that ‘[t]he proprietor of land … may mortgage the land’. The definition of ‘land’ in s 4 of the Act includes hereditaments, and the ‘proprietor’ in relation to a carbon right or carbon covenant is the person registered as the proprietor thereof. The *Carbon Rights Act* defines the carbon right and carbon covenant as ‘hereditaments’.193

In this way, the legislation extends the concept of a mortgage of ‘land’ to encompass a mortgage of a carbon right and carbon covenant.194 No specifications for dealing with such a mortgage are provided, although many of the Act’s provisions for a mortgage of land are unsuitable for a mortgage of a non-possessory interest. Examples of unsuitable provisions are the implied covenant by the mortgagor to keep the buildings on the land in repair,195 the mortgagor’s right of quiet enjoyment of the mortgaged property until default,196 and the mortgagee’s right to sell the mortgaged land in cases of continuing default and to grant and reserve easements.197

In summary, the Western Australian legislation creates new types of registrable rights but fails to particularise them. It proceeds by assimilating the new rights to established categories of property law (eg ‘hereditament’, ‘encumbrance’, ‘mortgage’), but with modifications which create uncertainty. The attachment of the carbon covenant to the carbon right is intended to create a composite instrument for individual definition and specification of the rights.

The legislature’s reliance on contract is consistent with libertarian and free market environmentalist ideas. It also represents a practical solution to the difficulties of legislative definition. The Australian states were the first jurisdictions in the world to introduce new property rights in forestry carbon pools. There was insufficient experience to enable legislators to anticipate the terms that would make a carbon property right useful and attractive to the market. It is not surprising that they chose to deliver to market participants a large degree of control of the nature and content of the new rights. The concern was to promote the early and rapid development of a market in forestry carbon rights. Apart from providing for registration, little thought was given to managing measurement costs over the longer term.

It remains to be seen how the addition of forestry carbon rights to the lexicon of real property rights will affect third parties in practice. Although the earliest state statutes were passed in the 1990s, it was not until 2011 that the Commonwealth introduced its carbon offsets scheme which allows landowners and investors to generate carbon credits by undertaking sequestration offset projects.198 The project proponent must hold the carbon sequestration right for the relevant area of land before a project can be declared an eligible offsets project for purposes of earning credits.199 The carbon sequestration right is not created under the

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193 *Carbon Rights Act* ss 6(3)(a), 12(4)(a).
194 A mortgagee of a carbon covenant must also be the mortgagee of the relevant carbon right: *Transfer of Land Act 1893* (WA) s 104K(2).
195 Ibid s 113.
196 Ibid s 116(1).
197 Ibid s 108.
198 *Carbon Credits (Carbon Farming Initiative) Bill 2011* (Cth).
199 *Carbon Credits (Carbon Farming Initiative) Act 2011* (Cth) ss 5, 15(2)(b)(f), 27.
Commonwealth law, but must be obtained under the legislation of the state in which the land is located. The introduction of the scheme will prompt the creation of carbon sequestration rights under the state laws.

**VI CONCLUSION**

Legal systems have traditionally limited the classes of property right to a short-list of standard types (the *numerus clausus*). As Merrill and Smith have shown, this arrangement limits measurement costs for persons dealing in the same asset in the future, persons dealing in other similar assets in the future, and persons who may incur liability for infringing the rights. Under the influence of free market environmentalism, legislators are expanding the class of property rights, but have lost sight of the lessons of the *numerus clausus*. The principle not only limits the menu of property rights but also ensures that each type of right is clearly defined and fully specified. While parties can add ‘fancies’ by contract, the starting point is a known quantity, a defined property right from which any additions and subtractions by contract can be measured.

Because economics fails to appreciate that property rights impose correlative duties on a wide class of duty-holders, policy-makers tend to under-estimate the measurement costs that novel or unusual property rights create for others. Recording or registering an agreement can bring it to a purchaser’s attention, but does not remove the need to assess its meaning and effect. Provision of information is not the same thing as communication.

Many commentators have drawn attention to contradictory, incoherent and even nonsensical provisions found in some recent legislation for new property rights. This article highlights a related issue, which has to date attracted little attention, namely the reliance on contractual specification. Contract is attractive to governments because it accords with collaborative and market-based approaches to regulation, and allows them to establish a range of new property rights speedily and with minimum drafting costs. Landowners and resource investors enjoy the freedom to design their own property rights within loosely defined statutory parameters, together with the certainty that agreements give them. Lawyers benefit from the demand for individually crafted agreements.

As Selmi observes in relation to the use of contracts in land use regulation, legislatures have been unduly focused on short-term objectives and ‘have been too passive in accepting the transition to contract without setting more specific rules governing its use’. The need for clarity is even greater when agreements are given in rem operation by statute.

The costs of contractual specification will largely fall upon future purchasers and landowners who are not represented as stakeholders in the process of

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200 See Merrill and Smith, ‘What Happened to Property’, above n 72.
201 See generally above n 125.
202 Selmi, above n 139, 645.
specifying the new property rights. They bear the burden of restrictions and obligations created by statutory agreements that run with the land as rights in rem. Contractual specification leaves them with measurement costs in processing information about rights which are unusual, ill-defined or under-specified, or which require individual assessment because they are substantially defined and specified by contract.

Difficult questions of statutory interpretation can arise where legislatures give in rem effect to statutory agreements without expressly defining their proper scope and content. The parties who create the agreement are unlikely to be concerned with the boundaries of statutory agreements, since all terms of their agreement bind them in contract. From their perspective, it makes sense to record all agreed terms in the same document without distinction. It is left to the successors to distinguish between terms in the agreement which are within the scope of the statute and terms which are not. The former operate in rem and bind the successors. The latter operate only in contract and bind only the covenangling parties. The question of whether an individual term in an agreement operates in rem may turn on contestable judgments about whether it is incidental to a statutory right or to an authorised term. Few purchasers are equipped to make such judgments. They will either need to obtain legal advice, or assume the risk that a term will be enforceable against them. Both options involve transaction costs.

Most civil and common law systems do not, as a general principle, allow parties to create positive burdens running with land. Rudden concludes that this limiting rule is based on a philosophic premise that parties to an agreement may not, by an exercise of their will alone, impose an affirmative duty on a third party who has not consented. McFarlane argues that any departures from the principle should require strong justification, be confined to carefully delimited circumstances, and be subject to registration requirements.


204 Insecurity and assumption of risk by purchasers has the same effect on the allocative efficiency of markets, see Omotunde I G Johnson, ‘Economic Analysis, the Legal Framework and Land Tenure Systems’ (1972) 15 Journal of Law & Economics 259, 259–60.

205 Rudden, above n 6, 247, 252. Civil law servitudes can be used to impose restrictions on land use but not to impose positive obligations, except where they are incidental to other types of obligations: Scottish Law Commission, Real Burdens, Discussion Paper No 106 (1998) 146 [7.65]. Rudden notes that the American and Israeli systems as exceptions: Rudden, above n 6, 252. More recently, New Zealand, the Northern Territory, Ireland and Northern Ireland have legislated to allow positive covenants to run with freehold land, while Trinidad and Tobago enacted legislation that has never been proclaimed: O’Connor, ‘Careful What You Wish For’, above n 63, 191–2.

206 Rudden, above n 6, 252.

207 McFarlane, above n 39, 330–1. The English Law Commission’s recommendations for allowing positive obligations to be created as ‘land obligations’ are carefully defined and are qualified by the ‘touch and concern’ test: Law Commission, above n 67, 102–9 [5.29]–[5.54].
If it is essential to a statutory scheme that enduring duties be placed upon future landowners, it is preferable that the duty be imposed directly by statute rather than by agreements made between other parties. Legislated duties offer the advantages of transparency, standardisation, universal application, public accountability, and the possibility of relief from obligations which have outlived their utility through the repeal or amendment of the statutes.208

208 Merrill and Smith, 'Optimal Standardization', above n 39, 61–8; Hepburn, above n 125, 239; Maguire and Phillips, above n 3, 235–6; O’Connor, ‘Careful What You Wish For’, above n 63, 205–7 (observing that it is more difficult for legislators to cancel obligations running with land if other landowners have a property right to enforce them).