

An Economic Analysis of Civil versus Common Law Property

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Abstract

Common law and civil law property appear to be quite different, with the former emphasizing pieces of ownership called estates and the latter focusing on holistic ownership. And yet the two systems are remarkably similar in their broad outlines, for functional reasons. This paper offers a transaction cost explanation for the practical similarity and the differing styles of delineating property and ownership in the two systems. As opposed to the “complete” property system that could obtain in the world of zero transaction costs, actual property systems use exclusion strategies as a shortcut to protect interests in use. Overlooking this relationship between use interests and the devices that protect them leads to the bundle of rights picture of property, even though property is a structured bundle of relationships. The architecture of property consists in part of four basic relationships, and a number of characteristic features of property automatically arise out this architecture, including exclusion rights, in rem status, and running to successors. Where civil law and common law differ is in their style of delineation, which reflects the path dependence of initial investment in feudal fragmentation in the common law and Roman-inspired holistic dominion in civil law. This transaction cost explanation for the functional similarities but different delineation process in the two systems promises to put the comparative law of property on a sounder descriptive footing.

Keywords

Property, Common Law, Civil Law, Ownership, Estate

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INTRODUCTION

Fragmentation is a theme in property theory, but the theory of property itself is deeply fragmented. At first blush, a major fault line in property lies between common and civil law. As is well known, civil law systems tracing back to Roman law place heavy emphasis on ownership (dominion) and are highly grudging in giving *in rem* effect to lesser interests like leaseholds and security interests. By contrast, the common law emphasizes the estate system and its many methods of carving up property, from life estates to defeasible fees and various future interests. And in the common law tradition in a broader sense, the equity courts developed the trust, which is largely unknown in traditional civil law. Sometimes this conventional wisdom about the gulf

between common and civil law of property goes so far as to claim that there is no such thing as ownership in the common law. Feudalism lives!

This stark cleavage between common and civil law has taken on a new life with the so-called “legal origins” literature,¹ which has influenced the World Bank’s pronouncements on development.² Supposedly, having a common law rather than a civil law system correlates with economic growth. Different versions of the literature posit different causal mechanisms as lying behind the correlations (to the extent that they have persisted in the face of continued testing and methodological questioning).³ Despite the favorable attention for their tradition, common law legal theorists have been quite unreceptive to this branch of the economic literature, partly because they doubt that the kinds of doctrines that distinguish civil from common law could possibly have real world effects, much less effects on the scale that the legal origins literature purports to find.⁴

How, if at all, is the distinction between civil and common law property important? Life goes on in the two systems in strikingly similar fashion. Putting aside for the moment special features like the trust, ownership under the civil law and fee simple ownership of land in the common law system (and for the most part the respective notions of full ownership of personal property) coincide to a remarkable extent in their basic features: a possessory right to prevent invasions subject to qualifications such as for necessity, and supplemented by duties (for example, for lateral support or to shovel sidewalks). Lesser interests, like leases and easements, despite some differences, bear a close resemblance in the two systems. So is the supposed difference between the two systems non-existent at the functional level,

¹ See, e.g., Rafael La Porta, Florencio Lopez-de-Silanes & Andrei Shleifer, *The Economic Consequences of Legal Origins*, 46 J. ECON. LITERATURE 285, 285-87, 291-98 (2008); Rafael La Porta et al., *Law and Finance*, 106 J. POL. ECON. 1113, 1113, 1116 (1998); see also Paul G. Mahoney, *The Common Law and Economic Growth: Hayek Might Be Right*, 30 J. LEGAL STUD. 503 (2001) (finding higher growth in countries of common law origin and attributing effect to judicial independence).

² Most notably legal origins and normative conclusions based on them have featured prominently in the World Bank’s Doing Business Reports. See, e.g., DOING BUSINESS IN 2004: UNDERSTANDING REGULATION xiv (relying on legal origins literature). For critiques, see, e.g., Benito Arruñada, *Pitfalls to Avoid when Measuring the Institutional Environment: Is “Doing Business” Damaging Business?*, 35 J. COMP. ECON., 729 (2007).

³ See, e.g., Holger Spamann, *Large-Sample, Quantitative Research Designs for Comparative Law?*, 57 AM. J. COMP. L. 797 (2009); Ralf Michaels, *Comparative Law by Numbers? Legal Origins Thesis, Doing Business Reports, and the Silence of Traditional Comparative Law*, 57 AM. J. COMP. L. 765 (2009).

⁴ See, e.g., Mark Roe, *Legal Origin and Modern Stock Markets*, 120 HARV. L. REV. 460 (2006) (arguing for greater importance of politics than legal origins as a cause of economic performance); see also Curtis Milhaupt, *Beyond Legal Origin: Rethinking Law’s Relationship to the Economy – Implications for Policy*, 57 AM. J. COMP. L. 831 (2009). The importance of the rule of law is a related but distinct question. See, e.g., KENNETH W. DAM, *THE LAW-GROWTH NEXUS: THE RULE OF LAW AND ECONOMIC DEVELOPMENT* 31-32 (2006).

putting labels like “dominion” and “estate” aside?

Upon closer inspection, the fault lines between common law and civil law are more subtle than conventionally thought, although in a sense they are more important and interesting. This paper will identify these more subtle fault lines and offer a transaction cost explanation for them.

A useful starting point is the theorizing about property by lawyers and economists in the two systems. In the common law world, and especially in the United States, the mainstream view looks at property as a bundle of rights – or more metaphorically as a “bundle of sticks” – holding between right holders and duty bearers with respect to a thing.⁵ Thus, with respect to Blackacre, A might have the right to exclude B, the right to use the land for growing corn, the right to cross over C’s neighboring land, etc. What the bundle picture denies is that there is some essence or core of property.⁶ On the bundle picture, “property” is a label that we can affix to any collection of these various use rights with respect to a resource. The traditional notion that property is a right to a thing availing against others generally – an *in rem* right – is considered an inconvenient obstacle to clear thinking and to badly needed reforms in the configurations of legal rights and duties, which will require owners to give way increasingly often to collective decision making.⁷ Even where the bundle picture holds less sway, property theorists and lawyers tend to emphasize the process of carving out interests, using forms tracing back to feudalism. One way or another the common law world emphasizes the types of

⁵ See, e.g., BRUCE A. ACKERMAN, PRIVATE PROPERTY AND THE CONSTITUTION 26-29 (1977) (reporting that the bundle-of-rights conception of property is so pervasive that “even the dimmest law student can be counted upon to parrot the ritual phrases on command”); Felix S. Cohen, *Transcendental Nonsense and the Functional Approach*, 35 COLUM. L. REV. 809, 839-42 (1935); Tom Grey, *The Disintegration of Property*, in NOMOS XXII: PROPERTY 69 (J. Pennock & J. Chapman eds., 1980). The bundle of rights theorists took some inspiration from the work of Wesley Newcomb Hohfeld. See Max Radin, *A Restatement of Hohfeld*, 51 HARV. L. REV. 1141 (1938) (interpreting the Hohfeldian scheme from a legal realist’s point of view); see also Arthur Linton Corbin, *Taxation of Seats on the Stock Exchange*, 31 YALE L.J. 429, 429 (1922) (“Our concept of property has shifted . . . ‘[P]roperty’ has ceased to describe any res, or object of sense, at all, and has become merely a bundle of legal relations—rights, powers, privileges, immunities.”). The bundle metaphor seems to have been first used in the late nineteenth century. See GREGORY S. ALEXANDER, COMMODITY & PROPRIETY: COMPETING VISIONS OF PROPERTY IN AMERICAN LEGAL THOUGHT, 1776-1970 at 455 n.40 (1997) (citing JOHN LEWIS, A TREATISE ON THE LAW OF EMINENT DOMAIN IN THE UNITED STATES 43 (1888)). The bundle picture has had a mixed reception in England. Compare TONY HONORÉ, OWNERSHIP, in MAKING LAW BIND 161 (1987) (analyzing ownership in a “mature legal system” into eleven elements) with J.E. PENNER, THE IDEA OF PROPERTY IN LAW 29-30, 71 (1997) (arguing against bundle of rights picture of property).

⁶ See, e.g., Wallace H. Hamilton & Irene Till, *Property*, in 12 ENCYCLOPEDIA OF THE SOCIAL SCIENCES 528, 528 (Edwin R.A. Seligman & Alvin Johnson eds., 1934) (defining “property” as “a euphonious collocation of letters which serves as a general term for the miscellany of equities that persons hold in the commonwealth”); see also Max Radin, *A Restatement of Hohfeld*, 51 HARV. L. REV. 1141 (1938) (interpreting the Hohfeldian scheme from a legal realist’s point of view).

⁷ For critiques of the bundle theory, see, e.g., Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357 (2001); J.E. Penner, *The “Bundle of Rights” Picture of Property*, 43 UCLA L. REV. 711 (1996).

fragmentation. Even Blackstone, who is famous for describing property as that “sole and despotic dominion which one man claims and exercises over the external things of the world, in total exclusion of the right of any other individual in the universe,”⁸ then immediately went on to describe in voluminous detail the various ways of fragmenting and qualifying property rights. By contrast to the common law, the civil law theory of property is all about *in rem* rights, and property – ownership in particular – is seen as inherently undivided. The civil law tradition generally has no place for and no interest in the bundle of rights picture of property.⁹ Countries with civil law systems may favor a large degree of government regulation, but this impulse has never expressed itself, as it did from the 1930s onward in the United States, in the bundle picture of property.

This differential receptiveness to the bundle picture is a key to the first fault line between common and civil law property. Civil and common law property focus on different aspects of an important distinction between the interests property serves and the devices that property law (and related social institutions like customs and norms) employ to serve them. Take the law of trespass as a particular basic and stark example. The law of trespass itself is exceptionally simple: voluntary, direct invasions of the column of space around a parcel of land with tangible objects (visible to the naked eye) count as trespasses, even if no measurable harm can be shown.¹⁰ This legal machinery – the tort and the boundaries that it uses to define invasions – are very over- and under-inclusive: the presence of unauthorized people or objects on land correlates imperfectly with damaging behavior like pilfering crops, trampling flowers, and snooping on household activities.¹¹ The latter correlated harms correspond closely to our interests in property, which are the reason or purpose we have property. These reasons can at a low level of specificity be characterized as sounding in specific uses – crop growing, maintaining a residence, enjoying aesthetic values – and more generally we can say that the devices of property law protect our interest in the use of things.¹²

⁸ 2 WILLIAM BLACKSTONE, COMMENTARIES *2.

⁹ A potential counterexample is Scandinavian Legal Realism, see, e.g., AXEL HÄGERSTRÖM, INQUIRIES INTO THE NATURE OF LAW AND MORALS (Karl Olivecrona ed., C.D. Broad trans., 1953); A. VILHELM LUNDSTEDT, LEGAL THINKING REVISED: MY VIEWS ON LAW (1956); KARL OLIVECRONA, LAW AS FACT (2d ed. 1971); ALF ROSS, ON LAW AND JUSTICE (1958); Alf Ross, *Tû-Tû*, 70 HARV. L. REV. 812 (1957), but Scandinavian systems are sometimes classified by themselves, apart from the French and German families, and the Scandinavian systems partake of some of the case-specific pragmatism of the common law. See Jes Bjarup, *The Philosophy of Scandinavian Legal Realism*, 18 RATIO JURIS 1 (2005); Heikki Pihlajamäki, *Against Metaphysics in Law: The Historical Background of American and Scandinavian Legal Realism Compared*, 52 AM. J. COMP. L. 469 (2004); Konrad Zweigert & Hein Kötz, INTRODUCTION TO COMPARATIVE LAW 277 (Tony Weir trans., Clarendon Press 3d ed. 1998).

¹⁰ See, e.g., *Adams v. Cleveland Cliffs Iron Co.*, 602 N.W.2d 215 (Mich. Ct. App. 1999); WILLIAM L. PROSSER, TORTS 63 (4th ed. 1971) (the law of trespass to land is “exceptionally simple and exceptionally rigorous.”); RESTATEMENT (SECOND) OF TORTS § 158.

¹¹ For a dramatic recent example, see *Jacque v. Steenberg Homes, Inc.*, 563 N.W.2d 154 (Wis. 1997) (upholding an award of punitive damages where only nominal compensatory damages were found).

¹² J.E. PENNER, THE IDEA OF PROPERTY IN LAW 68–74 (1997).

The rough indirect relation between devices like trespass and the interest in use is characteristic of the exclusion strategy defining the basic things of property, to which we return below.¹³ Such strategies are not the end of the story: when greater precision is required, the law turns to governance strategies, which focus on smaller categories of uses. Governance strategies employ more precise proxies, as in covenants (e.g. building height), easements, (e.g. travel on a defined path), nuisance (uses involving substantial and unreasonable harm), and the like.¹⁴ Governance strategies are definitionally more closely tied to the interests in use that they serve. Later we will be concerned with defining legal devices for protecting use-interests as those devices are defined along the temporal dimension, famously in the case of the common law in terms of estates.

What are our interests that the law of property serves? We adopt the view that people's primary interest in things is to *use* them, in the broadest sense. The notion of use includes nonconsumptive use like preservation, aesthetic and existence value, and non-possessory contingent use as in the security provided by mortgages and liens. By contrast, people have no socially recognized interest per se in excluding others from things, and someone who excludes for its own sake – without any reason other than to see someone else excluded – may be able to do so but would be considered somewhat odd. How is it then that, for many people, some version of the right to exclude is the centerpiece of property?¹⁵ Here we need to turn to the devices that property employs to serve people's interests in use. Again, take the law of trespass which employs in a fairly pure form the exclusion strategy for protecting property: by being able to exclude others who do not have permission, the possessor (and by extension owners) can go about using property for many different purposes they might have, as noted earlier. In the absence of further refinement through covenants, zoning and the like, the owner has a “reservoir” of uses that are protected by the law of trespass. All sorts of meddlers and thieves can be prevented from interfering with the uses because their access can be denied. The owner is not obligated to exercise exclusion rights, and the owner is free to offer conditional access, which conduces to all sorts of projects involving uses best undertaken in a joint manner.

The key here is that some strategies for protecting uses are highly indirect, because the proxies they use (for example, the crossing of the boundary of a parcel) are only

¹³ Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. S453, S467-78 (2002).

¹⁴ *Id.* at S471-74; Henry E. Smith, *Exclusion and Property Rules in the Law of Nuisance*, 90 VA. L. REV. 965 (2004).

¹⁵ See, e.g., J.W. HARRIS, PROPERTY AND JUSTICE 30–32 (1996) (analyzing property as an “open ended set of use-privileges” protected by “trespassory rules”); J.E. PENNER, THE IDEA OF PROPERTY IN LAW 68–74 (1997); Larissa Katz, *Exclusion and Exclusivity in Property Law*, 58 U. TORONTO L.J. 275, 277 & nn.6-8 (2008); Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 739 (1998).

roughly correlated with harm to the owner's interests.¹⁶ The law of trespass studiously avoids making reference to particular uses, and does not even require a showing of harm to any use whatever. Moreover, the law of trespass (like the law of ejectment, replevin, and the like) does not require the owner to justify the owner's uses, or even to show that they are more valuable than the uses that the defendant would like to undertake. One simple strategy based on a message of "keep off" or "don't touch" protects a large and indefinite class of interests in use in a wide variety of resources.

The indirectness between use-interests and the property devices that serve them arises for transaction cost reasons, and will, we argue, be the key for unlocking the difference between the common and civil law traditions in property. Why are devices like trespass only indirectly related to the use-interests they protect, or put differently, why aren't property doctrines more tailored to the interests they serve?

In the broadest sense, the indirectness of property stems from positive transaction costs. In a zero transaction cost world, the Coase Theorem shows that we could use any devices with any degree of tailoring to protect use interests, and if such devices were not optimal for those concerned – however many they are – they would transact costlessly toward the efficient result.¹⁷ Or, if we think of transaction costs as the costs of institutions,¹⁸ the most articulated bundle of rights imaginable – every right with respect to every conceivable fine-grained use as between every pair of people with respect to every contingency – could be effected without cost.¹⁹ In the real world, devices like trespass are blunt and simple in order to avoid transaction costs; they are a short cut over the hypothetical "complete" system of property rights that could be achieved in the zero transaction cost world. In our world we need to make do with a property system that uses a basic exclusion strategy and reserves more fine-grained regulation of uses to more direct devices such as covenant, nuisance, zoning, and custom, in a variety of governance strategies.²⁰

¹⁶ See, e.g., Henry E. Smith, *Mind the Gap: The Indirect Relation between Ends and Means in American Property Law*, 94 CORNELL L. REV. 959 (2009).

¹⁷ R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1 (1960).

¹⁸ See Douglas W. Allen, *What Are Transaction Costs?*, 14 RES. L. & ECON. 1 (1991) (arguing that transaction costs are better defined as the costs of establishing property rights, in the economist's sense of a de facto ability to derive utility from an action, rather than narrowly as the costs of exchange); see also RICHARD O. ZERBE, JR., ECONOMIC EFFICIENCY IN LAW AND ECONOMICS 168 (2001) (adopting Allen's definition); Steven N.S. Cheung, *The Transaction Costs Paradigm*, 36 ECON. INQUIRY 514, 515 (1998) (defining transaction costs as costs that do not exist in a Robinson Crusoe economy).

¹⁹ See Thomas W. Merrill & Henry E. Smith, *Making Coasean Property More Coasean*, J. L. & ECON. (forthcoming).

²⁰ Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. S453 (2002).

So some property devices that are more exclusionary are more indirectly related to uses than are other, governance-style devices that make more direct reference to our interests in use. But transaction costs motivate a particular type of indirectness: along several dimensions, the “outer contours” of the exclusion strategy form the baseline so that when devices become more tailored to use, there is typically a residual or reservoir left behind that is captured by the exclusion strategy. In the case of trespass, uses not covered by easements or the law of nuisance (and the like) are covered implicitly, as an open-ended and loosely specific set, by the exclusionary strategy of trespass. Or take the dimension of duty bearers: some property doctrines govern the relation of the owner to identified others, but in the absence of such specific and costly delineation the relation of the owner and “all others” is governed by the *in rem* aspect of property centering on its message to keep off. Likewise, the fact that property interests “run” to successor owners and duty bearers also can be seen as following from the transaction cost-motivated device of exclusion modified by governance: property devices, and the most exclusion-based ones in particular, make little reference to personal information about the owner, thus allowing one owner to be substituted for another without needed to update that information. Again, simplicity and insensitivity to context allow for a characteristic property “feature,” in this case alienability. But key to this transaction cost theory of property is that *in rem*-ness, the right to exclude, and running to successors are not fully detachable features of property: they are automatic consequences of the exclusion-governance architecture of property itself. What ties all these phenomena together is the transaction cost savings of treating property as a law of *things*. Civil law has a hard time moving beyond this starting point, whereas common law tends to obscure it.

Returning to civil versus common law property, we argue that the two traditions have each failed to distinguish sufficiently between the interest we have in use and the devices we use to protect those interests. Civil law starts with the legal interest that corresponds to fullest use interest we can have in dealing with things – the greatest degree of control one can have – and then evaluates each lesser interest and the various devices for protecting them, in terms of how it does or does not promote this full type of interest. By contrast, the common law system grew out of feudalism and has always focused on the complex devices, including the various lesser estates, which people might employ to protect various specific smaller classes of uses. Pushed to the limit, the common law then projects this fragmented picture back on the question of use itself and sees only a welter of specific uses and ignores the importance of the full reservoir protected by a simple exclusionary strategy. The bundle of rights in particular has an inherently analytical tendency in contrast to the dogged holism of the civil law. In

transaction cost terms, both systems need an indirect relation between use interests and the devices that serve them, but for historical reasons, civil law overemphasizes the overall interests in use whereas the common law overly stresses the particular legal interests. Civil law tries to assimilate the pieces (interests) and devices to the whole, whereas common law tries to articulate more specific uses corresponding to lesser interests and the devices that serve them. If the distinction between use interests on the one hand and legal interests and devices on the other is not made, then it is easy to underarticulate the lesser interests (civil law) or overarticulate the set of legal interests (common law).

Equally importantly, making this distinction between use-interests and devices leads to a transaction cost theory of the shape of property that is consistent with both traditions and avoids their characteristic distortions. Law and economics and New Institutional Economics both need a more articulated theory of property in order to explain property and ownership. With this theory in hand, we can explain the chunkiness of property emphasized by the civil law and the diversity of legal interests stressed in the common law and in law and economics – and in post-Realism more generally.

We capture the difference in delineation of property in civil versus common law and the relative lack of difference at the practical level as both reflecting transaction costs. The basic indirect relationship between interests in use and the devices (exclusion and governance strategies implemented through trespass, nuisance, the doctrine of necessity and so on) is an inevitable feature of the overwhelming transaction costs of the “complete” property system envisioned on many versions of the bundle of rights theory. But delineating these devices and relating them to the interests they serve also is costly. Because of their different histories, civil and common law face different costs of delineation. In civil law, the starting point is the undivided dominion and further division is a costly departure. These costs include the information costs of keeping track of the divisions and the need for third parties to process *in rem* rights.²¹ Doctrines like the *numerus clausus* serve to put the brakes on the proliferation of new types of lesser property rights. By contrast, the common law of property originated in feudalism, in which the focus was on personal relationships and reciprocal services. Thus, the fixed costs of a highly fragmented systems were incurred long ago under circumstances in which they were worth incurring for political reasons. The result has

²¹ See Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1 (2000); Henry E. Smith, *Standardization in Property Law*, in RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW 148 (Kenneth Ayotte & Henry E. Smith, eds., 2011).

been the persistence of a more articulated system than strictly necessary, especially given that a small number of combinable forms can achieve most parties' objectives. Part of this path dependence takes the form of a looser version of the *numerus clausus* in common law than in civil law countries.²² At the same time, the common law's high degree of articulation has obscured the utility of simplicity and the unity of ownership for many purposes, and at the level of theory has led to an extreme version of the bundle of rights taking on the status of conventional wisdom.

I. PROPERTY IS NOT A BUNDLE OF RIGHTS

The rise of the bundle of rights picture is a familiar one. We argue that neither property nor ownership in particular is a bundle of rights. "Property" in the economists' sense is any expectation of deriving value from a resource,²³ and in a legal sense "property" tends to be associated with the holding of a legally protected interest, but this definition has difficulties explaining characteristic features of property like its *in rem* effect and greater use of mandatory rules, than contract rights and contract law. As we will see, a better definition of property for legal purposes is motivated by transaction costs: a right to derive value from a resource is more property-like to the extent that it relies on a delineation strategy based on things. Ownership is the largest such right over a thing, from which lesser interests can be carved.

The bundle picture downplays the possibility of any core to either property or ownership. The bundle starts from some commonplace and correct observations about property but typically then extrapolates them out of all proportion. In the process, the holistic and architectural features of property thereby become obscured.

The bundle of rights – or more metaphorically the bundle of sticks – is in the first

²² Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 8-12, 20-24 (2000).

²³ See Armen A. Alchian, *Some Economics of Property Rights*, 30 IL POLITICO 816, 818 (1965), reprinted in ARMEN A. ALCHIAN, *ECONOMIC FORCES AT WORK* 127, 130 (1977) ("By a system of property rights I mean a method of assigning to particular individuals the 'authority' to select, for specific goods, any use from a nonprohibited class of uses."). See also YORAM BARZEL, *ECONOMIC ANALYSIS OF PROPERTY RIGHTS* 3 (2d ed. 1997) (defining property as "the individual's ability, in expected terms, to consume the good (or the services of the asset) directly or to consume it indirectly through exchange") (emphases omitted); THRÁINN EGGERTSSON, *ECONOMIC BEHAVIOR AND INSTITUTIONS* 33 (1990) (stating that "[w]e refer to the rights of individuals to use resources as *property rights*" and quoting Alchian's definition); Steven N.S. Cheung, *The Structure of a Contract and the Theory of a Non-Exclusive Resource*, 13 J.L. & ECON. 49, 67 (1970) ("An exclusive property right grants its owner a *limited* authority to make decision [sic] on resource use so as to derive income therefrom."); Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. PAPERS & PROC. 347, 347 (1967) ("An owner expects the community to prevent others from interfering with his actions, provided that these actions are not prohibited in the specifications of his rights.").

instance an analytical approach to property. Inspired by Wesley Hohfeld, whose program was almost purely analytical,²⁴ the bundle seeks to break down property into its smallest constituent parts – a sort of atomic or subatomic theory of property.²⁵ The first problem emerges when we ask: what is the smallest unit of analysis? The conventional answer is a right to use a resource availing between a right holder and a duty bearer.

When it comes to ownership, the bundle picture has made the question more difficult to address – or maybe even to take seriously. For the Legal Realists identifying “the” owner was of no special import and smacked of the dreaded conceptualism. The Realist solution is to define an owner as any holder of an interest; in other words, what the owner owns is not property (and not necessarily property in the civil law sense of dominion), but rather the owner owns an interest.²⁶ So the owner is roughly the holder or tenant of the feudal and post-feudal versions of the common law system of property.

Those of a more philosophical bent have tried to reconstruct the notion of ownership, while nonetheless maintaining the analytical spirit of the bundle picture. The most famous such effort is that of Tony Honoré, an English legal philosopher, whose conception of “full ownership” in a mature liberal legal system features no less than eleven elements.²⁷ Other philosophically oriented theorists have attacked the bundle picture directly, and their approach is, as we will see, quite compatible with our transaction cost theory.

Some legal philosophers have gone further in singling out exclusion as a special feature of property and ownership in particular.²⁸ As we will argue, the right to exclude is not really a stick in the property bundles (or the large bundle called “ownership” in particular) but a feature that falls out from property using an exclusion strategy (or

²⁴ Wesley Newcomb Hohfeld, *Some Fundamental Legal Conceptions as Applied in Judicial Reasoning*, 23 YALE L.J. 16 (1913).

²⁵ See, e.g., ALBERT KOCOUREK, AN INTRODUCTION TO THE SCIENCE OF LAW § 47, at 237 (1930) (“Jural relations are for the lawyer what atoms and molecules are for the chemist.”).

²⁶ See, e.g., RESTATEMENT OF PROPERTY § 10 (1936) (“The word ‘owner,’ as it is used in this Restatement, means the person who has one or more interests.”).

²⁷ See TONY HONORÉ, OWNERSHIP, in MAKING LAW BIND 161 (1987). Even Honoré privileges the right to exclude in that in his view an owner stands in a “special relation” to property because of the ability to exclude others from interfering with it. *Id.* at 128-34.

²⁸ See, e.g., J.W. HARRIS, PROPERTY AND JUSTICE 30–32 (1996) (analyzing property as an “open ended set of use-privileges” protected by “trespassory rules”); J.E. PENNER, THE IDEA OF PROPERTY IN LAW 68–74 (1997); Larissa Katz, *Exclusion and Exclusivity in Property Law*, 58 U. TORONTO L.J. 275, 277 & nn.6-8 (2008); Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 739 (1998); Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. S453, S469 (2002); Henry E. Smith, *Property and Property Rules*, 79 N.Y.U. L. REV. 1719, 1719, 1753-90 (2004); Henry E. Smith, *Self-Help and the Nature of Property*, 1 J.L. ECON. & POL’Y 69, 76–80 (2005).

more accurately a device based on the exclusion strategy) to define a basic thing over which an owner exercises rights in order to protect the owner's interest in use. The right to exclude is really the right to determine the use of an asset – a “gatekeeper” right.²⁹ The devices like the tort of trespass and the technology of boundaries it employs tend to use rough on/off proxies that only correlate loosely with use. Again, someone's presence inside the boundaries of a parcel is necessary to be able to steal crops but the proxy of boundary crossing is both under- and over-inclusive from the point of view of harm.³⁰

It is worth noting that some may point to the elasticity or flexibility of ownership in civil law—when a lesser property interest is extinguished, the bare owner recaptures the value and becomes the full owner again³¹—as evidence that ownership is quite different from fee simple absolute in common law. Nevertheless, in common law vocabulary, the elasticity just means that the original owner always keeps the remainder or reverter.³² Hence, the elasticity does not reflect a fundamental or structural difference between fee simple absolute and ownership. Rather, it tells that civil law limits the owner's alienability of property more than the common law does.

II. PROPERTY AS A STRUCTURED BUNDLE OF RELATIONS

In American property law, a property right has long been described as a collection of legal relations between parties with respect to things (or resources³³).³⁴ This characterization is less acceptable to property scholars in civil law countries.³⁵ The

²⁹ See, e.g., J.E. PENNER, *THE IDEA OF PROPERTY IN LAW* 29-30, 71 (1997); Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 739 (1998); Henry E. Smith, *Self-Help and the Nature of Property*, 1 J.L. ECON. & POL'Y 69, 78-79 (2005). *But cf.* Eric R. Claeys, Book Review, *Property 101: Is Property A Thing or A Bundle?*, 32 SEATTLE U. L. REV. 617, 633 (2009) (arguing that “an exclusive right of use determination has more focus and determinacy than a right to exclude”).

³⁰ Henry E. Smith, *Exclusion Versus Governance: Two Strategies for Delineating Property Rights*, 31 J. LEGAL STUD. S453 (2002).

³¹ See UGO MATTEI, *BASIC PRINCIPLES OF PROPERTY LAW: A COMPARATIVE LEGAL AND ECONOMIC INTRODUCTION* 78 (2000); Sief van Erp, *Comparative Property Law*, in *THE OXFORD HANDBOOK OF COMPARATIVE LAW* 1043, 1056 (Mathias Reimann & Reinhard Zimmermann ed., 2006).

³² When the retained reversionary future interests were not alienable, one solution was to call the “eventual” possessor the owner. Now that future interests tend to be more freely alienable, this solution is still available but its artificiality is more apparent.

³³ See Thomas W. Merrill, *Property and the Right to Exclude*, 77 NEB. L. REV. 730, 733 (1998) (“[T]here is a general consensus that property refers to particular rights of persons or entities with respect to scarce tangible and intangible resources; that property is distinct from and superior to the mere possession of resources...”).

³⁴ “The word ‘property’ is used in this Restatement to denote legal relations between persons with respect to a thing.” RESTATEMENT (FIRST) OF PROPERTY ch. 1, Introductory Note (1936). See also Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L. J. 357, 357-58 (2001) (“Property is a composite of legal relations that holds between persons.”); WILLIAM B. STOEBUCK & DALE A. WHITMAN, *THE LAW OF PROPERTY* 3 (3rd ed. 2000) ([P]roperty is comprised of legal relations between persons with respect to “things.”); Michael A. Heller, *The Boundaries of Private Property*, 108 YALE L. J. 1163, 1191-92. (1999); JOSEPH WILLIAM SINGER, *PROPERTY* 2 (3d ed. 2010).

³⁵ See BRAM AKKERMANS, *THE PRINCIPLE OF NUMERUS CLAUSUS IN EUROPEAN PROPERTY LAW* 13-14,

classical, mainstream theory in civil law countries treats a property right as a relation between a person and an object.³⁶ While we embrace the American version of property theory and will criticize the civil law idea in Section IV, we are also unsatisfied with the deemphasis on things in common law and with the fact that the nature or the typology of the property relationship has not been clearly spelled out.

In Section A, we argue that a property right contains *a structured bundle of relations*.³⁷ There are four prototypes of property relations (see Figure 1): property right holders vs. the government; property right holders vs. other property right holders; property right holders vs. some specific others; property right holders vs. all others. Our thesis can clarify the nature of property rights as relations and also helps to illuminate the difference between contractual relations and property relations.

In Section B, we re-visit the necessary elements of a property right and show how a focus on the “things” of property links them with the four proto-typical relations. In Section C, we compare a property right and contractual right in the light of our new conception of a property right.

A. *Four Prototypes of Property Relationship*

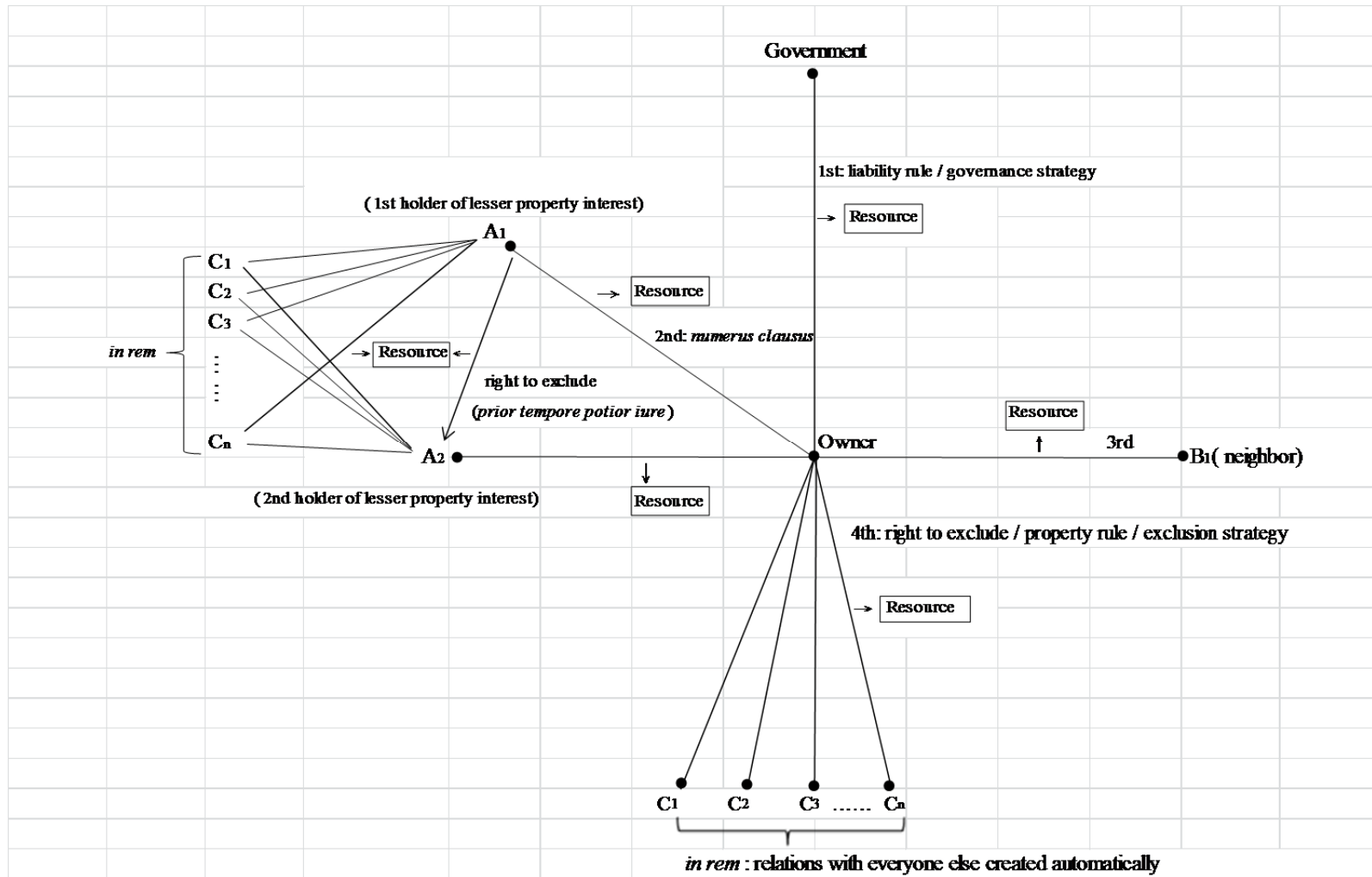
Not all property rights contain the four prototypical relations. For example, tenants in fee simple absolute who do not divide the estate or owners in civil law system who do not create lesser property interests do not interact with “other property right holders” (the second type of relation). Owners of properties not subject to special government regulations, civil code stipulations, or court-created rules do not have to deal with the “specific others” (the third type of relation). Nevertheless, the first and fourth type of relations – property right holders vs. the government and property rights holders vs. all others – are always contained in the bundle.

399, 409 (2008).

³⁶ See BRAM AKKERMANS, *THE PRINCIPLE OF NUMERUS CLAUSUS IN EUROPEAN PROPERTY LAW* 409 (2008); EVA STEINER, *FRENCH LAW: A COMPARATIVE APPROACH* 378 (2010).

³⁷ While the description of property as a bundle (or aggregate) of relations is not new, no literature seems to have pointed out the typology of property relations. And the literature’s use of “bundle of relations” seems to be coterminous with the “bundle of rights.” For such description, see, e.g., SUKHNINDER PANESAR, *GENERAL PRINCIPLES OF PROPERTY LAW* 19 (2001); Michael A. Heller, *The Boundaries of Private Property*, 108 *YALE L. J.* 1163, 1193 (1999) (criticizing the bundle metaphor); 6 *AMERICAN LAW OF PROPERTY* § 26.1 n.1 (citing from Heller).

Figure 1: Four Proto-typical Property Relations



1. *Property Right Holders vs. Government*

The first prototype of property relation exists between property right holders and the government in its role as user of eminent domain. This relation should be independent of other relations because the government's eminent domain power makes the property rights, as against the government, only protected by liability rules, while property right holders' interests are generally protected by property rules as against all others without authorized eminent domain power. Indeed, in setting out the framework of liability rules, under which an entitlement can be taken upon the payment of officially determined damages, as opposed to property rules, under which entitlements receive robust protection aimed at requiring an owner's consent, Guido Calabresi and A. Douglas Melamed discussed eminent domain as an example of liability rule.³⁸

If the relations with the government and those with non-governmental entities are mixed, as the traditional account seems to assume, eminent domain as a liability rule is like an exception to the general property rule protection. We contend that it is clearer to think of the liability rule as the rule in property right holders' relation with the government, and the property rule as the rule (with very few, sometimes unjustified,³⁹ exceptions) in property right holders' relation with others generally. They include non-governmental parties (that is, the second, third, and fourth type of relation), and with respect to the government outside the context of eminent domain (which typically includes some version of a public use requirement).

Abraham Bell and Gideon Parchomovsky proposed to use the concept of "pliability rule" to depict the entitlement protection changes when eminent domain occurs.⁴⁰ By (three-stage) pliability rule protection, Bell and Parchomovsky mean that an entitlement is originally protected by the property rule, but when the government decides to appropriate the property interests, the entitlement protection rule switches to the liability rule, and then after the government condemns the property interests, the entitlement protection rule switches back to the property rule. Bell and Parchomovsky even claimed that "in light of the ubiquity of takings, all property entitlements should

³⁸ Guido Calabresi & A. Douglas Melamed, *Property Rules, Liability Rules, and Inalienability: One View of the Cathedral*, 85 HARV. L. REV. 1089, 1122 (1972); see also Richard A. Epstein, *A Clear View of The Cathedral: The Dominance of Property Rules*, 106 YALE L.J. 2091 (1997) (noting that eminent domain is associated with ex ante procedural protections).

³⁹ See Yun-chien Chang, *The Inefficiency of the Accession Doctrine: A Case for the Property Rule*, working paper.

⁴⁰ Abraham Bell & Gideon Parchomovsky, *Pliability Rules*, 101 MICH. L. REV. 1, 59-64 (2002).

be viewed as protected by pliability protection, at least vis-à-vis the government.”⁴¹ We are unwilling to go this far. One advantage of separating the relations with the government and those with non-governmental entities is to clearly demonstrate that in the latter relation, entitlements are still protected by the “old-school” property rule. On the other hand, in this prototypical property relation, the entitlement can be considered as protected by the liability rule or the pliability rule, depending on how the government here is defined. If the government is narrowly defined as the user of eminent domain power,⁴² then the entitlement is only protected by the liability rule. Bell and Parchomovksy define the government more broadly, as including policemen performing warrantless search and seizure;⁴³ if so, then the pliability rule is the way to go. But for our purposes, either characterization is fine.

2. *Property Right Holders vs. Other Property Right Holders*

The second proto-typical property relation is among property right holders. A typical example from the common law is the relations between estate holders, say, between A with a life estate and B with the remainder. In the civil law system, there are two sub-types: first, the relations between the “bare owner”⁴⁴ and the holders of “lesser property interests,” such as between a mortgagor and a mortgagee; second, the relations among holders of lesser property interests; for instance, between a mortgagor and another person who holds an easement over the same land. In the first sub-type of relation, a property interest holder voluntarily changes her relation with someone from exclusion (the fourth type) to sharing property rights (by awarding some of the sticks in her interests—not necessarily ownership/fee simple). In the second sub-type of relation, lesser property interests are governed by the doctrine “*prior tempore potior iure*, or who is earlier in time is stronger as to the right.”⁴⁵ In other words, the right to exclude still applies. For example, the mortgagor (who is earlier in time) can request the court to remove the easement when the mortgaged land parcel is auctioned.

A property right holder can enter into almost any kind of contractual relation with others. But because of the *numerus clausus* principle,⁴⁶ a property interest holder can

⁴¹ Abraham Bell & Gideon Parchomovsky, *Pliability Rules*, 101 MICH. L. REV. 1, 60 (2002).

⁴² On the other hand, private, non-governmental entities that are authorized to condemn may fall into this category.

⁴³ Abraham Bell & Gideon Parchomovsky, *Pliability Rules*, 101 MICH. L. REV. 1, 60 (2002).

⁴⁴ This is the “*nu-propriétaire*” in French law. See Laurent Aynes, *Property Law*, in INTRODUCTION TO FRENCH LAW 147, 161 (George A. Bermann & Etienne Picard eds. 2008).

⁴⁵ See, e.g., W.M. Kleijn et al., *Property Law*, in INTRODUCTION TO DUTCH LAW 103, 109 (J.M.J. Chorus et al. ed. 2006).

⁴⁶ See, generally, Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L. J. 1 (2000); Henry Hansmann & Reinier Kraakman,

only enter into a limited number of types of property relations.⁴⁷ And the nature (rights and obligations) of the relations between property rights holders are determined by civil codes or common law doctrines,⁴⁸ leaving limited room for parties to adjust.

3. *Property Right Holders vs. Some Specific Others*

The third type of relation is where civil codes, regulations, or court-made doctrines adopt a governance strategy and thus the property right holder's right to exclude is limited or even deprived altogether. For example, in nuisance law, property owners cannot always require their neighbors to stop producing noise or odor, if their neighbor's activity level is reasonable. In boundary encroachment disputes, property owners sometime will be required to tolerate a neighbors' good faith innocent encroachment. Also, landlocked owners can pass through their neighbors' land to access public road under certain circumstances.⁴⁹ The list can go on. This type of relation has to be distinguished from the second type of relation because property right holders do not *voluntarily* enter into such relations with those specific others. It is different from the fourth type because usually the "specific others" will be neighbors or people in the same community, not total strangers, and because the right to exclude is incomplete.

4. *Property Right Holders vs. All Others*

The shadow example in the previous literature on property relationship is the relations between property right holders (say, owners) and most people in the world. The *in rem* nature of property rights discussed in the literature refers to this type of relation. Some commentators seem to consider the fourth type of relation as *the* property relation.⁵⁰ Millions (and an increasing number) of relations are created *automatically* every time any kind of property right is created. The nature of these

Property, Contract, and Verification: The Numerus Clausus Problem and the Divisibility of Rights, 31 J. LEGAL STUD. S373 (2002). For critique of both theories and discussions of the application of this principle in China and Taiwan, see Yun-chien Chang, *Is Freedom of Property Form Principle Efficient?: Interpretations of Article 757 of the Taiwan Civil Code and the Underlying Theory*, 7 TECHNOLOGY LAW REVIEW 119 (2010) (in Chinese).

⁴⁷ This corresponds to the *Typenzwang* idea in German law. See NIGEL FOSTER & SATISH SULE, GERMAN LEGAL SYSTEM AND LAWS 493 (4th ed. 2010).

⁴⁸ This is called *Typenfixierung* in German law. See NIGEL FOSTER & SATISH SULE, GERMAN LEGAL SYSTEM AND LAWS 493-94 (4th ed. 2010).

⁴⁹ See the discussion of this issue in Yun-chien Chang, *Legal Servitude of Passage: A Comparative and Economic Analysis*, working paper.

⁵⁰ See Sjef van Erp, *Deconstruction and Reconstruction of European Property Law: A Research Agenda*, in LEGAL ENGINEERING AND COMPARATIVE LAW 105, 117 (E. Cashin Ritaine ed., 2009).

relations is simple and clear—property right holders have a right to exclude anyone who does not have either of the other three prototypical relations with the property right holders. In other words, entitlements of property right holders are protected by property rules.

B. *The Sine Qua Non of Property Right*

Some theorists have looked for a *sine qua non* of a property right, although on the most extreme bundle of rights view no stick is more privileged than any other. The most frequent candidate for the essential feature of property is the right to exclude, and even some prominent bundle theorists have given it a special prominence.⁵¹ Our argument is that all of these views come up short. For information cost reasons, the right to exclude and allied features “fall out” of a thing-based approach to property – they simply follow from the basic set-up.

What is a thing? This sounds like a metaphysical question, but we will follow both the Romans and the common law lawyers in invoking philosophical notions only as they are required for practical reasons.⁵² In particular, we argue that property is a law of things – that we have a law of things in the first place – for transaction cost reasons. In what might be termed the Coase Corollary, in a zero transaction cost world property could take on any contours without any effect on the efficiency of the resulting pattern of use.⁵³ This includes defining its basic scope. A “complete” property system, in which property was defined with “full” precision on all dimensions, would be costlessly achievable: in such a system rights would refer to the tiniest uses over the shortest times availing between each pair of members of society, existing and unborn, and would incorporate every conceivable contingency.⁵⁴ In other words, the property system will exclusively use the governance strategy.

In our world property rights are “incomplete” so as to save transaction costs.⁵⁵ Note that property rights can be incomplete in at least two senses. Incomplete property rights in the literature refers to the incomplete delineation of property rights.

⁵¹ See, e.g., Felix S. Cohen, *Dialogue on Private Property*, 9 RUTGERS L. REV. 357, 374 (1954).

⁵² On the highly practical use of philosophy by the Romans in the area of *specificatio*, a form of accession, in which schools of thought differed in terms of how to conceive of the persistence of a thing over time, see J.A.C. Thomas, *Form and Substance in Roman Law*, 19 CURRENT LEGAL PROBLEMS 145, 147-57 (1966).

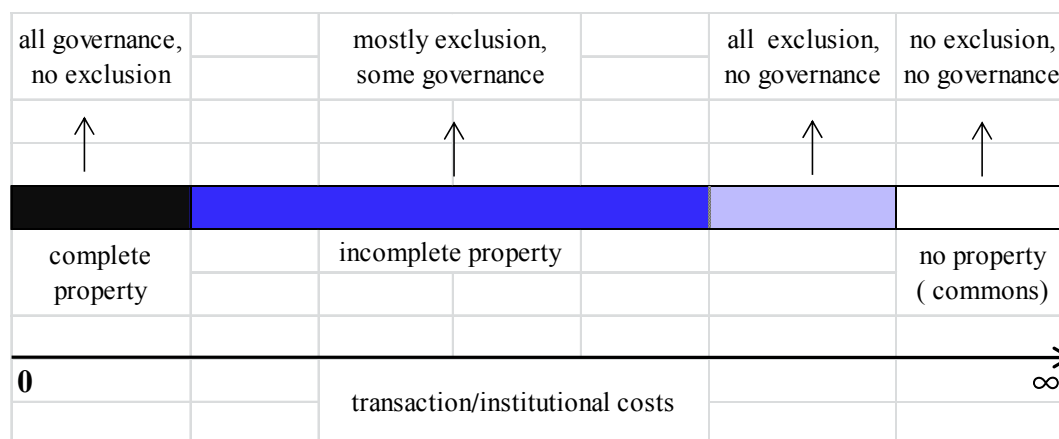
⁵³ Thomas W. Merrill & Henry E. Smith, *Making Coasean Property More Coasean*, J. L. & ECON. (forthcoming).

⁵⁴ By the same token, in a zero transaction cost world, we would not need property rights as all. See Steven N.S. Cheung, *The Transaction Costs Paradigm*, 36 ECON. INQUIRY 514, 515, 518-20 (1998); see also R.H. COASE, *THE FIRM, THE MARKET, AND THE LAW* 10, 14-15 (1988) (agreeing in principle with this observation).

⁵⁵ On the other hand, when transaction costs are high, we have to adopt the exclusion strategy, thus making property rights incomplete.

That is, some resources, like the high seas, are held in an open-access commons, or not propertized, more generally.⁵⁶ Our notion of incomplete property rights here refers to the indirect device employed to manage propertized resources. The law does not (cannot, for transaction costs reasons) stipulate every tiniest use of each property. Instead, the law designates an owner who has a presumptive right to exclude others from to determine the use of a defined thing.⁵⁷ By defining a thing in the exclusion strategy, people’s interests in use can be managed at relatively low cost. The owner will decide how to transact with others to share the use. For the typical relations among transaction costs, the completeness of property rights and the two strategies, see Figure 2.

Figure 2: Transaction Costs and Completeness of Property Rights



How the thing is defined will give rise to many features of property without any extra definition. This is what makes property rights special and gives them their “residual” character. John Austin noticed this aspect of property when he said of property that “indefiniteness is of the very essence of the right; and implies that the right . . . cannot be determined by exact and positive circumscription.”⁵⁸ Particularly with respect to uses, the basic way that property is set up obviates the need to spell out uses. The result is that an owner has control over an indefinite reservoir of uses.⁵⁹ Not

⁵⁶ See, e.g., Antonio Nicita, *On Incomplete Property: A Missing Perspective in Law and Economics?*, in PROPERTY RIGHTS DYNAMICS: A LAW AND ECONOMICS PERSPECTIVE 77, 77-90 (Donatella Porrini & Giovanni Battista Ramello eds, 2007).

⁵⁷ A presumptive right to exclude in property law is like a majoritarian default rule in contract law. They both serve to save transaction costs. For default rule theory in contract law, see, e.g., Ian Ayres & Robert Gertner, *Filling Gaps In Incomplete Contracts: An Economic Theory of Default Rules*, 99 YALE L.J. 87 (1989).

⁵⁸ 2 J. AUSTIN, LECTURES ON JURISPRUDENCE 827 (4th ed. 1873).

⁵⁹ RESTATEMENT OF PROPERTY § 5 comment e, § 10 comment c (1936); Bernard E. Jacob, *The Law of Definite Elements: Land in Exceptional Packages*, 55 S. CAL. L. REV. 1369, 1388 (1982) (discussing how Restatement definition of complete ownership requires “not only reasonably exclusive present control, but also an indefinite reservoir of potential uses”).

having to spell out the uses in this reservoir saves on transaction costs. Only for particularly contested uses does it make sense to separately delineate legal relations in terms of such uses. For access to a driveway or the rights and duties with respect to odors and the like, it makes sense to focus in on use in a governance regime, but our resources for focusing in selectively are thereby conserved for where they are most needed.

Let us consider how some features thought to be characteristic of property follow from this basic transaction cost-saving move of defining a thing through an exclusion strategy. They include *in rem* status, the right to exclude, and running with assets. As shall be clear from the discussions below, these three essential features are concepts at different levels: being *in rem* refers to the automatic creation of property relations between property interest holders and all others (the fourth prototypical relation); the right to exclude describes the nature of the second and fourth prototypical relations, and, to a lesser extent, the third prototypical relation; and running with assets mean that when a party to a property relation transfer her rights to another person, the new interest holder just steps into the shoes of the original interest holder without disturbing the existing property relations.⁶⁰ The fact that these three features are essential yet conceptually entwined is probably why the prior literature has been unclear about their conceptual relationship.

Table 1 Comparison of Prototypical Property Relations and Strategies of Property Delineation

Prototypes of Property Relations	Strategy/protection
First (versus government)	Liability rule
Second (versus other interest holders)	
<i>Sub-type 1</i> (between bare owners and holders of lesser property interests)	(Voluntary) governance, subject to <i>numerus clausus</i>
<i>Sub-type 2</i> (between holders of lesser property interests)	Right to exclude
Third (versus specific others)	(Involuntary) governance
Fourth (versus all others)	Right to exclude

⁶⁰ The first prototypical relation is not closely linked with the three essential features, because liability-rule protection of property rights against the government is *not* the nature of property rights. In fact, property rights in a jurisdiction without eminent domain power are, in a sense, purer, stronger, and more property-like.

1. *In Rem*

Property is an *in rem* right. Etymologically this means a right to a thing, and historically there is a connection between property being a right to a thing and its being *in rem* in the sense of availing against others generally. The concept of *in rem* in German law is very prominent,⁶¹ and it means that the right is good against the world – usually called “the principle of absoluteness (*Absolutheitsprinzip*)” in German law.⁶² In both civil and common law property, the thing mediates the relation between the owner and the duty bearers, who are largely told to keep out or not to interfere, unless they have the owner’s permission.

Communicating with a large and indefinite class of persons whose main contribution to the value of property is not to interfere saves on transaction costs.⁶³ In our world of positive transaction costs, contracting with all others to keep them off one’s properties is prohibitively costly. Automatically creating a right to exclude all others thus saves immensely on transaction costs. Using the thing makes the right impersonal in the sense that contextual information about the owner and the duty holders is generally not relevant to the nature of the right (duty). When more specific parties are involved, the further delineation of legal relations can use the thing as a platform for getting more specific. Thus, the law of nuisance prescribes proper use as between neighbors, and covenants and contracts can deal with very specific uses.

The *in rem* character of property is not an on/off feature but is the baseline that is created when a thing is defined for purposes of exclusion. Sometimes the things involved are “preexisting” in the sense that people have prelegal intuitions about what a thing is. Such is the case with chairs and cats. Other times the thing is partially defined by the law, as in the case of land boundaries, and sometimes almost wholly constructed, as with the boundaries of a patent claim. In any of these situations, the communication of the duty is as wholesale as it can be, by announcing general duties of non-interference with owned things.

2. *Right to Exclude*

As noted earlier, many, including a number of Legal Realists, have given prominence to the right to exclude in property. Various commentators mean different

⁶¹ See MURRAY RAFF, *PRIVATE PROPERTY AND ENVIRONMENTAL RESPONSIBILITY: A COMPARATIVE STUDY OF GERMAN REAL PROPERTY LAW* 186 (2003).

⁶² See NIGEL FOSTER & SATISH SULE, *GERMAN LEGAL SYSTEM AND LAWS* 494 (4th ed. 2010).

⁶³ Henry E. Smith, *The Language of Property: Form, Context, and Audience*, 55 *STAN. L. REV.* 1105, 1153-57 (2003).

things about the right to exclude and exclusion. We agree with those who argue that our interest in property is one of use that is formally protected by a right to exclude implemented through devices like trespass.⁶⁴ Nonetheless when one says that the right to exclude is the essence or of special importance in property, what does this mean?

Again, the importance of the right to exclude and its limits follow from the transaction cost theory that sees in exclusion a shortcut over a “complete” property system defined in terms of uses in as fine-grained a way as possible.

The transaction cost theory suggests that the right to exclude is not a “stick in the bundle,” despite the frequent pronouncements to that effect by, for example, the United States Supreme Court.⁶⁵ Rather the exclusion strategy sets the baseline – it is a platform or starting point – from which we know what a thing is and from which departures in both directions – subtractions from the owner’s rights and additions to the package – can take place. For example, the doctrine of necessity and antidiscrimination law withdraw sticks from the exclusion-based baseline of rights, and easements and rights of lateral support add to it.

For transaction cost reasons it is important to distinguish between interests and the devices that serve them. If exclusion is the starting point for defining thing-based packages of rights – property – this is not to say that there is an interest in exclusion or that such an interest is more important than the interests in (and policies for) saving life and limb (necessity) or promoting racial equality (antidiscrimination law) that are served by more specific laws. On the contrary, exclusion and governance are simply different, with the former supplying the rough platform for the other. Likewise, the more refined problems on which lawyers as “transaction cost engineers” focus their attention are important but it is also important to realize the baseline of exclusion they rest on and why it is there – as a transaction cost shortcut. For transaction cost reasons, the right to exclude is not a “stick” that can be added or subtracted. While one can add to or subtract from the baseline, the right to exclude is associated with that baseline and, although it can vary in strength, it is built into property, again for transaction cost reasons.

⁶⁴ See, e.g., J.E. PENNER, *THE IDEA OF PROPERTY IN LAW* 68–74 (1997); Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 *YALE L.J.* 357, 394-97 (2001); Henry E. Smith, *Exclusion and Property Rules in the Law of Nuisance*, 90 *VA. L. REV.* 965, 990-96 (2004).

⁶⁵ *Kaiser Aetna v. United States*, 444 U.S. 164, 176 (1979) (stating that for a property owner “the right to exclude others” is “one of the most essential sticks in the bundle of rights that are commonly characterized as property”).

3. *Running with Assets*

Others have identified another candidate for the “essence” of property: the ability of a right to “run” with an asset into remote hands.⁶⁶ That B can succeed to A’s interest when A holds a fee simple, other present and future interests, an easement, etc., is unremarkable and correlates very closely with what we might call property. Even more telling, when a contract between neighbors runs to successors, it is placed with easements in the supercategory of servitudes and comes close to being treated as a property right. The theoretical difference between an easement and a running covenant is that the former but not the latter binds third parties (*in rem*), but in the context of neighbors it is the parties and their successors that are important. Thus, if A covenants with B that A will not build more than a two-story building, and both intend for the covenant to run, and it touches and concerns the land, it will run to successors.⁶⁷ Thus creates a notice problem, and for this reason the history of servitudes has been intertwined with land records. In the early days, enforcement of servitudes was stingy because of notice problems from the lack of good records (especially in England), but these days recording in the land records makes running of covenants routine (as far as the notice problem goes).⁶⁸

Again, the running of the covenant is not a detachable feature and certainly not a stick in the bundle. Rather to the extent that the right is embedded in the baseline package of rights associated with a thing, then it is natural for it to run. For this reason, appurtenant easements, which are explicitly carved out property rights “run” without controversy. More specifically, the baseline is (consistent with the notion of a thing) meant not to contain contextual information about persons, and so who holds the right and the duty is irrelevant. From there it is a short step to saying that successors are bound. In general, de-contextualizing a right is a predicate for its alienability. The same is true for rights that run to successors.

The bundle of rights picture of property can be misleading, because many of the features of property are really not detachable sticks. The contribution of those features of property associated with the basic exclusion strategy are not really additive and separable in the sense that the Legal Realists bundle of rights picture presupposes. Rather they are an architectural baseline from which much implicitly flows, without the

⁶⁶ See, e.g., Henry Hansmann & Reinier Kraakman, *Property, Contract, and Verification: The Numerus Clausus Problem and the Divisibility of Rights*, 31 J. LEGAL STUD. S373 (2002).

⁶⁷ See THOMAS W. MERRILL & HENRY E. SMITH, *PROPERTY: PRINCIPLES AND POLICIES* 1026-34 (2007)

⁶⁸ On the notice problem and how it shapes the law of servitudes, see Carol M. Rose, *Servitudes*, in RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW 296 (Kenneth Ayotte & Henry E. Smith, eds., 2011).

need for costly additional delineation.

C. *Property versus Contract*

The literature on the comparison of property and contract is vast and we do not intend to review it here. Our goal here is to quickly point out the basic differences between property and contract based on the above discussion. In terms of distinction in the nature of the relations, contractual relations exist only between contracting parties. The government does not have a special relation with contracting parties. In contract law, there is no *in rem*, automatic creation of relations against non-contracting parties. The principle of freedom of contract generally prevails in contract law, as compared to the *numerus clausus* principle in property law. Contract does not always concern resources. Contracts do not bind any third party, while property rights automatically bind all third parties. Property law follows *prior tempore potior iure*; thus, lesser property interests that are created earlier are prioritized over those created later. By contrast, in contract, no such hierarchy exists — the buyer who contracts with the seller first does not have “a right to exclude” the buyer who contracts with the seller later (that is, the first buyer normally cannot ask for a specific performance to deliver the goods in question against the seller and the second buyer).

Therefore, a relation that does not contain all the essential features of a property right is not a typical property relation; such relations that contain features beyond an ordinary contract are quasi-property relations. We will return to this issue in Part IV.

III. COMMON LAW PROPERTY

The common law of property is not usually thought of as a law of things, and the bundle of rights picture has only brought things further out of the focus for property theorists. Much of the deemphasis on things can be laid at the door of the estate system. One can say that whereas the land law in civil law systems is one of ownership, it is one of *estate* in the common law countries.⁶⁹

A. *Focus on the Estate System to the Exclusion of Other Lesser Property Interests*

What is an estate? It is a piece of ownership. Originally in the feudal system that William the Conqueror introduced into England after 1066, the King himself was the

⁶⁹ John Henry Merryman, *Ownership and Estate (Variations on a Theme by Lawson)*, 48 TUL. L. REV. 916 (1974).

only full owner.⁷⁰ Out of full ownership were carved lesser legal interests: in return for rights to land the tenant (“holder” of the interest) would be obligated to provide service to the lord. These services started out as military but were gradually supplanted by monetary obligations. A tenant could turn around and subinfeudate all the way down to land holding peasants. The feudal obligations were abolished in 1660 with the Statute of Tenures, but the system of dividing property rights in the United States tracks the feudal system, with modifications. (The 1925 land reform legislation in England largely did away with the system of legal estates.⁷¹) Now the system of estates basically measures property interests by time (which includes conditions and limitations that can cause an interest to end).

These days interests are rarely carved up using the estate system directly. Instead, other than leases, interests less than fee simple absolute or full ownership are created in trust, a device tracing back to the activities of the courts of equity and the desire of feudal tenants to avoid certain monetary obligations. The conventional view of the trust is that it splits ownership into legal and equitable sides.⁷² The trustee holds the legal title and therefore can deal with the property and, if there are no instructions to the contrary, can alienate the trust corpus, managing the corpus and its substitutes over time according to fiduciary duties. The beneficiary holds equitable title, meaning that the fiduciary duties are owed to the beneficiary and that the beneficiary has the right to the proceeds of the corpus according to the terms of the trust when it was set up by the settlor. Also, if the trustee wrongfully alienates trust assets, the beneficiary can follow them into the hands of purchasers who had notice or did not give value.

The flip side of the great attention to divisions by time and the extensive use of the trust is that the common law system does not regard as central to property a variety of other types of division. Security interests are a type of conditional property right that tend to be covered more in commercial law than in property courses. Even the status of leases as both contract and property has been cloaked in some confusion: leases give possessory rights and are somewhat standardized as to subtypes, but they are otherwise customizable.⁷³ And crucially while they “run” to successor landlords, they are avoidable in bankruptcy like contract rights. Likewise, bailments have not received much attention, despite being widespread, as in coat checks, parking, and the like. But

⁷⁰ See A.W.B. SIMPSON, *A HISTORY OF THE LAND LAW* 47 (2d ed. 1986).

⁷¹ C. Dent Bostick, *Land Title Registration: An English Solution to an American Problem*, 63 *IND. L.J.* 55, 78 (1987).

⁷² This view has recently been questioned by those who see equitable property as rights against rights. See Ben McFarlane & Robert Stevens, *The Nature of Equitable Property*, 4 *J. EQUITY* 1 (2010).

⁷³ Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 *COLUM. L. REV.* 773, 811-20 (2001).

again, bailments sit uncomfortably at the intersection of the *in rem* and *in personam*.⁷⁴

B. *Transaction Cost Explanations*

Our transaction cost theory of the common law has a practical and theoretical aspect. The common law of property is not as different from civil law as conventional wisdom would have it. In both systems the broad contours of the system and their basic architectural features are dictated by the overwhelming transaction cost savings of an “indirect” property system. Nonetheless, in terms of details and in terms of theory, civil law and common law take different starting points in their delineation of legally protected interests less than full ownership.

The combination of large fixed costs and the original needs of the conquering Normans lent the common law system its particular character. Originally, the goal of the system was to buy loyalty for the new Norman ruling class and above all for the King. The mechanism of time- and condition-based infeudation fit the bill nicely. Much delineation effort in the form of fixed costs went into setting up the system. Once the original feudal motivation disappeared the question was what to do with the system. The fixed costs of a highly articulated system had already been incurred. The degree of fragmentation – or more accurately the types of fragmentation as well as their number – is the reflection of path dependence. We can see this at work these days: it is widely acknowledged that we do not need as many defeasible fees as we have, but there is little constituency for reform.

Importantly, the generative quality of the basic estate system means that much can be accomplished with a very small set of interests, and the larger set that we have is mostly a matter of inconvenience. Functionally complex structures of multiple future interests are possible because the various methods of decomposition can feed themselves (for instance, a life estate, followed by a remainder in life estate followed by a remainder in fee simple).⁷⁵ We would never set the system up with as many interests as we currently have, but inertia (possibly helped along by the self-interest of lawyers) keeps it that way.⁷⁶

⁷⁴ Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 811-20 (2001).

⁷⁵ Henry E. Smith, *Standardization in Property Law*, in RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW 148, 164-65 (Kenneth Ayotte & Henry E. Smith, eds., 2011).

⁷⁶ For some proposals to simplify the system of estates and future interests, see, e.g., RESTATEMENT OF THE LAW (THIRD), PROPERTY: WILLS AND OTHER DONATIVE TRANSFERS (DRAFT); Thomas P. Gallanis, *The Future of Future Interests*, 60 WASH. & LEE L. REV. 513 (2003); Lawrence W. Waggoner, *Reformulating the Structure of Estates: A Proposal for Legislative Action*, 85 HARV. L. REV. 729

By contrast, the common law system never invested more than other systems in articulating other dimensions of division, except for the trust. And the trust took a lot of pressure off from the inadequacies of these divisions: property rights could be divided in unconventional ways (conditioned on various events and according to the limited discretion of the trustee) without needing to involve significant *in rem* effects. (It thus also made the estate system easier to use as well.) So path dependence offers an explanation for why the common law is flexible about divisions without needing an elaborate theory of *iura in re aliena* (rights on the property of another) along the lines of the civil law.

England's different history also receives an explanation. In England, land records were quite inadequate, partly because of privacy concerns and an inability to mandate registration.⁷⁷ In 1925, the reform of land records meant that with not that much additional effort, a nationwide reform of the estate system could be undertaken. In the United States, land records go back to Colonial times, and any reform effort would have to be a state by state affair, helped along by uniform acts. Such an effort is underway, but it is too early to tell what headway it will make.

IV. CIVIL LAW PROPERTY

Property laws in civil law jurisdictions are not the same, just as American property law and English property law are not clones of each other. Indeed, property laws in France and Germany are conceptually different in many ways.⁷⁸ In a comparative discussion of civil law properties, this article for obvious reasons cannot handle civil codes in every country. In this Part, we will use civil codes from six countries as our major targets: Germany, France, the Netherlands, Japan, China, and Taiwan. Germany's civil code (the *Bundesgesetzbuch*, or *BGB*) is probably the most influential civil code in the world, and has been taken as a model by many other countries like Japan, China, Taiwan, Korea, Greece, Switzerland, and Austria.⁷⁹ France's *code Napoléan* was promulgated in 1804 and also influenced many countries

(1972).

⁷⁷ See C. Dent Bostick, *Land Title Registration: An English Solution to an American Problem*, 63 *IND. L.J.* 55, 77 (1987).

⁷⁸ Nevertheless, "some overriding similarities remain [in German civil code and French civil code]." JOHN HENRY MERRYMAN & ROGELIO PEREZ-PERDOMO, *THE CIVIL LAW TRADITION: AN INTRODUCTION TO THE LEGAL SYSTEMS OF EUROPE AND LATIN AMERICA* 32 (3rd ed. 2007).

⁷⁹ See MURRAY RAFF, *PRIVATE PROPERTY AND ENVIRONMENTAL RESPONSIBILITY: A COMPARATIVE STUDY OF GERMAN REAL PROPERTY LAW* 16-17 (2003); Albert H. Y. Chen, *The Law of Property and the Evolving System of Property Rights in China* 9-12 (May 25, 2010), available at SSRN: <http://ssrn.com/abstract=1615499>.

such as Spain, Portugal, and Romania. The Netherlands passed a brand new and highly-praised civil code (*Burgerlijk Wetboek*; hereinafter, *BW*) in 1992. Japan borrowed heavily from Germany⁸⁰ but invented some new ideas. China's domestically highly contentious Property Law came into force in 2007. China inherited the German model through Taiwan's civil code and modified it with the legal tradition of the former U.S.S.R. to accommodate state- or collectively owned land.⁸¹ Taiwan's property law is a mixture of laws from Germany, Japan, and Switzerland, as well as its customary law before the codification in 1930. Local variations do exist, but civil codes regarding property are more similar to each other than they are to common law property regimes. In the following, we will demonstrate how civil law property regimes are based on ideas that are internally inconsistent or theoretically difficult. And we will also offer a transaction cost explanation.

A. *Dependence on the Notion of the "Thing"*

The dependence of civil law property on the notion of things is immediately apparent in the title of the law. Property law in Germany is called "*Sachenrecht*," literally translated as the law of things.⁸² And *Sachen*/things only include corporeal objects, thus excluding claims or intellectual property rights.⁸³ One can only have the right of ownership in a corporeal object, but not an incorporeal object. Property laws in the Netherlands,⁸⁴ Japan,⁸⁵ China, and Taiwan⁸⁶ use basically the same conceptual framework. By contrast, in French law, incorporeal objects are considered movable

⁸⁰ See, e.g., R. C. VAN CAENEGEM, AN HISTORICAL INTRODUCTION TO PRIVATE LAW 158 (D. E. L. Johnston trans., Cambridge University Press 1992) (1988).

⁸¹ See Albert H. Y. Chen, *The Law of Property and the Evolving System of Property Rights in China 7* (May 25, 2010), Available at SSRN: <http://ssrn.com/abstract=1615499>.

⁸² See NIGEL FOSTER & SATISH SULE, GERMAN LEGAL SYSTEM AND LAWS 493 (4th ed. 2010).

⁸³ See NIGEL FOSTER & SATISH SULE, GERMAN LEGAL SYSTEM AND LAWS 493 (4th ed. 2010). Section 90 of BGB "Only corporeal objects are things as defined by law."

http://www.gesetze-im-internet.de/englisch_bgb/englisch_bgb.html#BGBengl_000P90

⁸⁴ Art. 3:2 BW. See BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 258 (2008). The Dutch Civil Code, however, includes incorporeal things under the "patrimonial rights (*vermogensrechten*)," which, along with things, form the "assets (*goederen*)." See CHRISTIAN VON BAR & ULRICH DROBNIG, THE INTERACTION OF CONTRACT LAW AND TORT AND PROPERTY LAW IN EUROPE: A COMPARATIVE STUDY 319 (2004).

⁸⁵ See HIROSHI ODA, JAPANESE LAW 164-65 (3rd ed. 2009); Article 85 of Japan Civil Code "The term "Things" as used in this Code shall mean tangible thing"

<http://www.japaneselawtranslation.go.jp/law/detail/?re=02&yo=%E6%B0%91%E6%B3%95&ft=2&ky=&page=2>

⁸⁶ China's Property Law and Taiwan's Civil Code are unclear about the inclusion of incorporeal objects. The leading opinion in Taiwan is that although claims are not objects of property rights, natural forces can be. See TZE-CHIEN WANG, TAIWAN'S PROPERTY LAW 51 (2010) (in Chinese). In China, most scholars, probably following German law, contend that only corporeal objects can be owned. See, e.g., HUI-XING LIANG & HUA-BIN CHEN, CHINA'S PROPERTY LAW 8 (2007) (in Chinese).

properties.⁸⁷ On the other hand, in common law property, “things” include incorporeal objects.⁸⁸

Civil law property theory is structured on the ownership of corporeal things. The concept of property derived thus fits uneasily with security property rights such as mortgage, not to mention intellectual property rights⁸⁹ and trusts,⁹⁰ both of which are of increasing importance in the modern property world. Below we focus our discussions on lesser property interests, as trust and intellectual properties have not been fully embraced in common and civil law countries as typical property rights.⁹¹

Civil law countries, at least those influenced by the German model, conceptualize property as dominion of things.⁹² This conceptualization is closely related to the choice for limiting the objects of property law to corporeal objects and theorizing property rights as holding between persons and things (rather than persons versus persons about things). The problem with conceptualizing property as dominion is that this framework can best explain the most prominent type of property right, ownership, regarding the owner’s relationship with “all others” (the fourth proto-typical property relation). Nevertheless, even civil lawyers meet problems when explaining the second

⁸⁷ See EVA STEINER, *FRENCH LAW: A COMPARATIVE APPROACH* 382 (2010); BRAM AKKERMANS, *THE PRINCIPLE OF NUMERUS CLAUSUS IN EUROPEAN PROPERTY LAW* 409 (2008). See also UGO MATTEI, *BASIC PRINCIPLES OF PROPERTY LAW: A COMPARATIVE LEGAL AND ECONOMIC INTRODUCTION* 75 (2000) (observing that in France and Italy, a property right may have an intangible thing as its objects).

⁸⁸ See JOHN SPRANKLING ET AL., *GLOBAL ISSUES IN PROPERTY LAW* 1 (2006) (“In the United States, we broadly define ‘property’ as legally enforceable rights among people that relate to ‘things.’ The particular ‘thing’ might be land, or a tangible object. . . , or an intangible item.”); CHRISTIAN VON BAR & ULRICH DROBNIG, *THE INTERACTION OF CONTRACT LAW AND TORT AND PROPERTY LAW IN EUROPE: A COMPARATIVE STUDY* 319 (2004).

⁸⁹ In the German model, intellectual property rights are not typical property rights, because intellectual properties are not corporeal. See JÜRGEN BAUR & ROLF STÜRNER, *SACHENRECHT* 11 (§2 Rn. 2) (18th ed. 2009). French law, however, treats intellectual properties as movable properties. See Laurent Aynes, *Property Law*, in *INTRODUCTION TO FRENCH LAW* 147, 151 (George A. Bermann & Etienne Picard eds., 2008); HENRY DYSON, *FRENCH PROPERTY AND INHERITANCE LAW: PRINCIPLES AND PRACTICE* 15 (2003).

⁹⁰ For trust law in Germany (*Treuhandeigentum*), see NIGEL FOSTER & SATISH SULE, *GERMAN LEGAL SYSTEM AND LAWS* 499 (4th ed. 2010); BRAM AKKERMANS, *THE PRINCIPLE OF NUMERUS CLAUSUS IN EUROPEAN PROPERTY LAW* 184-86 (2008); JÜRGEN BAUR & ROLF STÜRNER, *SACHENRECHT* 24-26 (§3 Rn. 34) (18th ed. 2009). For trust law in France (*propriété fiduciaire*), see Laurent Aynes, *Property Law*, in *INTRODUCTION TO FRENCH LAW* 147, 161 (George A. Bermann & Etienne Picard eds., 2008); EVA STEINER, *FRENCH LAW: A COMPARATIVE APPROACH* 387-89 (2010). For a comparison of common law and civil law trusts, see Henry Hansmann & Ugo Mattei, *The Function of Trust Law: A Comparative Legal and Economic Analysis*, 73 N.Y.U. L. REV. 434 (1998); Sjef van Erp, *Deconstruction and Reconstruction of European Property Law: A Research Agenda*, in *LEGAL ENGINEERING AND COMPARATIVE LAW* 105, 118-19 (E. Cashin Ritaine ed., 2009).

⁹¹ *But cf.* UGO MATTEI, *BASIC PRINCIPLES OF PROPERTY LAW: A COMPARATIVE LEGAL AND ECONOMIC INTRODUCTION* 76 (2000) (observing that intellectual properties in all legal systems are handled within a proprietary paradigm).

⁹² The German literature is fond of using “*Zuordnung*” (allocation) and “*Herrschaft*” (control) to describe the nature of property rights. Yong-qin Su, *Freedom of Transaction for Goods That Can Be Registered*, 2010 Fall NANJING UNIVERSITY LAW REVIEW 16 (2010) (in Chinese); MANFRED WOLF, *SACHENRECHT* §1 Rn. 4 (18ed. 2001); JÜRGEN BAUR & ROLF STÜRNER, *SACHENRECHT* 307 (§24 Rn. 5) (18th ed. 2009).

prototypical property relation, especially the relations between owners and holders of “lesser property interests.”⁹³

In the German model, followed by Japan, China, and Taiwan, lesser property interests can be further divided into two groups: use rights and security rights.⁹⁴ In the French model, lesser property interests are divided into “principal property rights” and “accessory property rights.”⁹⁵ The former corresponds to the use right in German law, while the latter corresponds to the security right in German law. Accessory property rights (or security rights) have posed theoretical problems for the French and German model which both over-emphasize ownership of things in defining property rights. French law (followed by the Dutch law⁹⁶) uses the “*démembrement*” method to create lesser property interests. *Démembrement* is subtraction or taking away parts of the whole and complete ownership.⁹⁷ In other words, “the limited property right comprises a fragment of the right of ownership.”⁹⁸ Because modern French legal scholarship only recognizes three elements of ownership—*usus*, *fructus*, and *abusus* (that is, the right to use, enjoy, and dispose),⁹⁹ not including security rights, it is unclear whether security rights are property rights and there has been fierce debate about this issue.¹⁰⁰ On the other hand, the German model has problems of its own. In German law, ownership is absolute, always unitary, and not fragment-able. The existence of limited property rights only burdens the exercise of the powers of ownership, but the right of ownership itself remains whole.¹⁰¹ This seems to be an unnecessarily complicated theory.¹⁰² What is more problematic is that the insistence of the German model on property right as dominion of corporeal things is inconsistent with the fact that claims, which are incorporeal and not things, can be the object of pledge,¹⁰³ a type of lesser property

⁹³ This concept has been alternatively translated as “lesser proprietary interests,” “limited real rights,” or “secondary rights.” In German law, *das beschränkte dingliche Recht*. For a discussion of translating this term to English, see Sjef van Erp, *European Property Law: A Methodology for the Future*, in EUROPEAN PRIVATE LAW: CURRENT STATUS AND PERSPECTIVES 227, 235 (Reiner Schulze & Hans Schulte-Nölke eds., 2011).

⁹⁴ See MURRAY RAFF, PRIVATE PROPERTY AND ENVIRONMENTAL RESPONSIBILITY: A COMPARATIVE STUDY OF GERMAN REAL PROPERTY LAW 188 (2003); NIGEL FOSTER & SATISH SULE, GERMAN LEGAL SYSTEM AND LAWS 510 (4th ed. 2010).

⁹⁵ See BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 165 (2008).

⁹⁶ See *id.* at 270-71, 414.

⁹⁷ See *id.* at 413.

⁹⁸ See *id.* at 116.

⁹⁹ See *id.* at 93.

¹⁰⁰ See *id.* at 165-66.

¹⁰¹ See *id.* at 179, 191-99, 415-16.

¹⁰² This “external-cumulative approach” in the German model, however, makes it easier to explain why one person can be the mortgagor and mortgagee at the same time. See Sjef van Erp, *Comparative Property Law*, in THE OXFORD HANDBOOK OF COMPARATIVE LAW 1043, 1056 (Mathias Reimann & Reinhard Zimmermann ed., 2006).

¹⁰³ MANFRED WOLF, SACHENRECHT §1 Rn. 12 (18ed. 2001).

interest.¹⁰⁴

In summary, the key to understanding the problems of the German and French models is that when civil law property scholars define property rights, they think of only ownership and equate the concept of ownership with property. And because they do not define ownership properly, they have to allow exceptions in the family of property rights to accommodate security rights.

The correct way to conceptualize property rights and ownership is to treat them separately. Property is not coterminous with fee simple absolute or ownership. As elaborated above, a property right is any right regarding resource that is embedded with an *in rem* right to exclude “all others” and runs with assets, while fee simple absolute/ownership is an accumulation of all types of broadly-defined use rights that contain all the necessary features of a property right—or, to put it differently under the common law mindset, fee simple absolute/ownership can be carved into all types of use rights. In addition, there should be no exception in the definition of property rights. Those rights that do not contain all the core elements of property rights are at best quasi-property rights, to which we turn in the next section.

B. *Theoretical Difficulty in "Propertized Contract"*

One interesting difference between civil and common law is that while the civil law treats both contracts and torts under the common heading of obligation (in German, *Schuld*) and strictly separates obligation from property,¹⁰⁵ property, contracts, and torts are three different legal areas in the common law, though many sub-areas in torts and property, such as nuisance and trespass, overlap.¹⁰⁶ The German conceptual framework that strictly separates property and obligation (especially

¹⁰⁴ For the same criticism, see CHRISTIAN VON BAR & ULRICH DROBNIG, *THE INTERACTION OF CONTRACT LAW AND TORT AND PROPERTY LAW IN EUROPE: A COMPARATIVE STUDY* 317 (2004). Quite a number of civil law countries adopt a broader definition of things, thus including incorporeal objects. These countries include Portugal, Italy, Austria, Belgium, etc. See *id.* at 317-18.

Some property scholars in Taiwan, on the other hand, have stick to dominion of corporeal things and treated such pledges as merely quasi-properties. See, e.g., TSAY-CHUAN HSIEH, *TAIWAN'S PROPERTY LAW*, VOL. I 13-14 (5th ed. 2010) (in Chinese).

¹⁰⁵ While Germany, France, the Netherlands, Japan, and Taiwan more or less separate obligation (contract and torts) and property, China may be an exception. China stipulated its General Principles of the Civil Law in 1986, Contract Law in 1999, Employment Contract Law in 2007, Property Law in 2007, and Tort Law in 2009. It is still unclear if and when China incorporates these separate codes, whether tort law and contract law will be placed under the heading of obligation law.

¹⁰⁶ Another interesting difference is that in civil law countries, private law scholars usually master all three areas (property, contract, and torts)—though, because of the strict separation between obligation and property, it is even more common for a private law scholar to be an expert in contract and torts at the same time. By contrast, in common law countries, at least in the U.S., it is unusual for a law professor to teach (not to mention to be an expert in) all three areas.

contract), however, has to face the existence of something in-between, such as contracts with third-party effects, which was codified but fit uneasily into the strict dichotomy. Its focus on the dominion of things rather than relations, we argue, makes it difficult to accurately conceptualize and categorize these intermediate relations.

Take lease as an example of contracts with third-party effects. The lease is a property relation in the common law world¹⁰⁷ but is a contractual relation in the civil law world. Recognizing the hardship imposed on lessees if they have no right against the new property owners who acquire properties from the lessors, most, if not all, civil codes adopt a rule that is called “a sale does not break a lease.”¹⁰⁸ That is, if certain conditions (usually regarding notice) are met, the new owners have no choice but to step in the shoes of the original lessors—that is, the lease runs with the asset. German lawyers call this “*Verdinglichung obligatorischer Rechte*” which can be literally translated as “reified contractual rights,”¹⁰⁹ which are neither a typical property nor a typical contract.¹¹⁰ We will instead use the term “propertized contract” or “propertized contractual rights/relation,” to make the intermediate nature obvious. Probably to keep the strict separation as intact as possible, German scholars have argued that conceptually this is the only type of intermediate relation between contract and property.¹¹¹

Also, in Germany¹¹² and Taiwan,¹¹³ tenants in common can in a covenant allocate

¹⁰⁷ Note, however, that in the U.S., leasehold is also partially “contractized.” See, e.g., Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 811-20 (2001); Thomas J. Miceli et al., *The Property-Contract Boundary: An Economic Analysis of Leases*, 3 AM. L. ECON. REV. 165, 166-67 (2001); DUKEMINIER ET AL., PROPERTY 431-39 (6th ed. 2006).

¹⁰⁸ France: See BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 160-61 (2008). Germany: See BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 240-43 (2008). The Netherlands: Art. 7:226 *BW*. Japan: See HIROSHI ODA, JAPANESE LAW 164 (3rd ed. 2009). Taiwan: Article 425 of the Taiwan Civil Code.

¹⁰⁹ See Sjef van Erp, *Deconstruction and Reconstruction of European Property Law: A Research Agenda*, in LEGAL ENGINEERING AND COMPARATIVE LAW 105, 118 (E. Cashin Ritaine ed., 2009).

¹¹⁰ For propertized contracts in Japanese law, see HIROSHI ODA, JAPANESE LAW 164 (3rd ed. 2009).

¹¹¹ See, e.g., Claus-Wilhelm Canaris, *Die Verdinglichung Obligatorischer Rechte*, in FESTSCHRIFT FÜR WERNER FLUME 377-78 (Horst Heinrich Jokobs ed., 1978). Accord CHUNG-JAU WU, CIVIL LAW AND JURISPRUDENCE: VOL. IV 23 (2010) (in Chinese). Wu is a Germany-trained Taiwan scholar.

¹¹² Section 1010(1) of *BGB*: “Where the co-owners of a plot of land have arranged the management and use or excluded permanently or for a period of time the right to require the co-ownership to be dissolved, or have laid down a notice period, the provision agreed on has effect against the successor in interest of a co-owner only if it is registered in the Land Register as an encumbrance of the share.”

http://www.gesetze-im-internet.de/englisch_bgb/englisch_bgb.html#BGBengl_000P1010

¹¹³ Article 826-1 of Taiwan Civil Code: “(1) The covenant of the use, management, partition or partition inhibition or the decision made between the co-owners of the real property according to the first paragraph of Article 821, is bound to the share transferee or the person who acquires the right *in rem* after its recordation. The same rule shall apply to the management which a court has ruled that has been recorded. (2) The agreement and decision upon the thing held in indivision or the order made by the court between co-owners of personal property shall also bind the share transferee and the person who acquires the right *in rem*, but only when such person knows or should have known of such case while transferring or acquiring. (3) When the share of the thing held in indivision is transferred, the transferee is jointly and severally liable for the charges arising from the use, management, or other matters related to the thing

how each co-tenant uses and manages a specific part of the co-owned real property. If the covenant is registered in the real estate registry, subsequent transferees of any co-tenant's share will be bound by the covenant. That is, the covenant runs with assets. Property scholars in Germany and Taiwan generally consider this kind of covenant as "propertized contract."¹¹⁴

Nevertheless, if property rights are understood according to our framework above, intermediate relations will not pose theoretical or conceptual problems and we can understand properties and quasi-property rights more accurately. In Part II we pointed out the *sine qua non* of property relations and several distinctions between property relations and contractual relations. We argue that if a relation in question meets one or two but not all three essential features (*in rem*, right to exclude, and running with assets) of a property relation, it is a quasi-property relation. Seen from this angle, the "propertized contract" conventionally understood by civil lawyers actually contains a variety of relations that are propertized to different extents. In the lease example above, the rights run only when a lessee transfers her title but not when a lessor transfers her "leasehold" (to paraphrase the common law term).¹¹⁵ In addition, the lessor is not equipped with an *in rem* right to exclude because of the lease contract itself. Thus, the "a sale does not break a lease" doctrine only minimally propertizes the lease contract. On the other hand, in a covenant to use co-owned properties, the covenant runs no matter which co-tenant transfers her share, and co-tenants already have an *in rem* right to exclude each other and all others for unauthorized use or transfer. Hence, the covenant is an added layer to the property relations between co-tenants. In other words, this type of covenant is not a quasi-property relation between co-tenants, but a full-blown property relation between co-tenants.¹¹⁶

Merrill and Smith have pointed out that in the property-contract interface, there are two types of intermediate relations: "quasi-multital" (relations with indefinite, nonnumerous parties) and "compound-paucital" (relations with definite, numerous parties).¹¹⁷ Our analysis here not only points out that civil lawyers only have in mind quasi-multital relation (as propertized contract generally binds indefinite, nonnumerous parties), ignoring the possibilities of compound-paucital relations, but

held in indivision" <http://law.moj.gov.tw/Eng/LawClass/LawContent.aspx?PCODE=B0000001>

¹¹⁴ See, e.g., JÜRGEN BAUR & ROLF STÜRNER, *SACHENRECHT* 32 (§3 Rn. 47)(18th ed. 2009); Yun-chien Chang, *An Economic Analysis of the Article 826-1 of the Taiwan Civil Code: The Distinction Between Property Rights and Quasi-Property Rights*, NATIONAL TAIWAN UNIVERSITY LAW JOURNAL, forthcoming (reviewing the literature in Taiwan) (in Chinese).

¹¹⁵ See Sjeff van Erp, *Comparative Property Law*, in *THE OXFORD HANDBOOK OF COMPARATIVE LAW* 1043, 1053 (Mathias Reimann & Reinhard Zimmermann ed., 2006).

¹¹⁶ See Chang, *supra* note 114.

¹¹⁷ See Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 786 (2001).

also argues that quasi-multital relations can further be categorized. The civil law lease is one type of quasi-multital relation. Covenants for co-owned personal properties are another case in point. The Taiwan civil code stipulates that co-owners of personal properties can also covenant to arrange usage. Nevertheless, because a registry for most personal properties does not exist in Taiwan, the law stipulates that only bad-faith transferees of the shares are bound by the covenants. Here, whether the covenant runs with assets depends on whether a third party knows enough about what she buys! Since the covenant does not always run, but bad-faith third-parties are still bound by the covenant, the covenant constitutes another type of quasi-multital/quasi-property relation (different from the lease type).¹¹⁸

C. *Transaction Cost Explanations*

Why have civil law countries adopted and stuck to the three features—the unitary concept of property rights, strict separation between property and obligation, and definition of property rights as relations between persons and things? As we have demonstrated above, these concepts cannot adequately explain lesser property rights like mortgage or pledge and inhibit civil laws from adequately characterizing intermediate relations between contract and property that are prevalent nowadays. We argue for a path-dependence explanation here, even though the path is very long, and sometimes winding.

As is well known, civil law systems nowadays, especially their laws of property,¹¹⁹ are still deeply influenced by the Roman law that was stipulated about two millennia ago and was self-consciously revived at various later times. The concepts have persisted in many ways in the European Continent for two thousand years. The Roman jurists thought that property/in rem refers to a relationship between a person and a thing,¹²⁰ and they regarded only corporeal things (*res corporales*) as the object of property rights—as a result, they “felt no need to make a clear distinction between ownership and its objects.”¹²¹ Nevertheless, in many respects, the Roman property law is strikingly different from the modern civil property law: The Roman law adopts an extremely rigid unitary concept of property rights. Indeed, under classical Roman law, the property owners were “not allowed to transfer anything less than the entire

¹¹⁸ Taiwan Supreme Court, in another context, has ruled that a contract could bind bad-faith parties and those who should have (but do not have) knowledge about the contract. This relation is yet another type of quasi-multital/quasi-property relation.

¹¹⁹ See Sjef van Erp, *A Comparative Analysis of Mortgage Law: Searching for Principles*, in *LAND LAW IN COMPARATIVE PERSPECTIVE* 69, 71 (Maria Elena Sanchez Jordan & Antonio Gambaro eds., 2002).

¹²⁰ BARRY NICHOLAS, *AN INTRODUCTION TO ROMAN LAW* 100 (1962).

¹²¹ BARRY NICHOLAS, *AN INTRODUCTION TO ROMAN LAW* 106-07 (1962).

bundle of rights, privileges, and powers that he had in the property,” with very few exceptions.¹²² In addition, “there is no Roman definition of ownership...the commentators adapted the definition of usufruct by adding to the rights of use and enjoyment” the right of disposal.¹²³ Furthermore, security interests such as pledge (*pignus*) and mortgage (*hypotheca*) are discussed in obligation,¹²⁴ not property.¹²⁵ The idea of “possession” is used restrictively, applied only to owners, because the “Roman probably understood by ‘possession’ not simply the holding of a thing but rather the holding of a thing in the manner of an owner”; that is, say, a usufructuary is not in possession of the land he uses.¹²⁶

The three features first developed by the Romans and inherited by the civil law countries actually make sense—for the Romans. Since full ownership is the predominant form of property rights, a unitary concept is probably the clearest, if not the only, way to capture the idea of full ownership as the major form of property rights. In addition, without some forms of security rights that do not entitle their interest holders to possess or literally use the thing, conceiving property rights as relations between persons and things¹²⁷ is perhaps conceptually easier to understand than the property concept we advance in this article. Given the Roman’s narrow concept of property rights, intermediate relations are largely inconceivable, thus justifying a strict separation between property and obligation.¹²⁸

With the fall of the Roman Empire came the feudal property system and various local customary laws. But Roman law and its property concept were not dead. Roman law continued to be studied by jurists in various places, including in what is now France and Germany, and sometimes even drawn on to adjudicate cases.¹²⁹ Still, how was Roman law formally internalized into those modern civil codes? In the case of France, when the Revolution overthrew the old political regime and the accompanying feudal property system,¹³⁰ the commission established by Napoleon to submit a draft of a new

¹²² Francisco Parisi, *Entropy in Property*, 50 AM. J. COMP. L. 595, 603-04 (2002).

¹²³ BARRY NICHOLAS, AN INTRODUCTION TO ROMAN LAW 154 (1962).

¹²⁴ Note that in countries like Portugal mortgage and pledge are still stipulated in obligation. The French Civil Code stipulates mortgage and pledge separately from contracts and property.

¹²⁵ One modern commentator has considered it “both of contract and of property.” *See id.* at 150.

¹²⁶ *See id.* at 110-11.

¹²⁷ For such conception of property in Roman law, see, e.g., Laurent Aynes, *Property Law*, in INTRODUCTION TO FRENCH LAW 147, 147 (George A. Bermann & Etienne Picard eds. 2008).

¹²⁸ For the Roman conception of strict separation, see BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 172 (2008) (citing Von Savigny).

¹²⁹ *See, e.g.*, BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 84 (2008) (“[I]t became a custom of French lawyers to invoke the *Corpus Iuris Civilis*. In this respect, Roman law was customary law in the south of France.”)

¹³⁰ *See* Francisco Parisi, *Entropy in Property*, 50 AM. J. COMP. L. 595, 602 (2002); BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 85 (2008).

civil code based its ideas of ownership and property law mainly on Roman law.¹³¹ Why revive Roman law? As Francisco Parisi indicated, “[d]uring the 18th century, it had become fashionable to point to the feudal tradition as the root of inefficient property fragmentation and to rebel against the feudal heritage by proclaiming a new paradigm of absolute and unified property.”¹³² The “new” paradigm is actually quite old and was the undercurrent of the property regime through the medieval and pre-Revolutionary era, especially in Southern France.¹³³ Thus, modeling a new civil code after the Roman one saved information costs for French jurists¹³⁴ and obviated the institutional costs of switching to a new set of property doctrines that are not necessarily better than Roman law.

In the case of Germany, the Roman law was formally “received”¹³⁵ as binding law long before Germany was unified in 1870.¹³⁶ Therefore, it should come as no surprise that many German scholars in the nineteenth century considered a unitary concept of ownership as “the only possible type of ownership.”¹³⁷ The Roman idea of strict separation was also whole-heartedly accepted by German jurists (*Trennungsprinzip* in German) and is even considered the foundation of German property law.¹³⁸ Thus, similarly, codifying the Roman law principle reduces information costs and institutional costs.¹³⁹

With French property law and German property law as its modern incarnation, the Roman property law concept takes flight—to even Asia. First Japan, then Taiwan¹⁴⁰

¹³¹ See BRAM AKKERMANS, *THE PRINCIPLE OF NUMERUS CLAUSUS IN EUROPEAN PROPERTY LAW* 86 (2008). Indeed, the subject matter of Code Napoleon was almost identical with that of the first three books (persons, things, and actions) of the Institutes of Justinian. See JOHN HENRY MERRYMAN & ROGELIO PEREZ-PERDOMO, *THE CIVIL LAW TRADITION: AN INTRODUCTION TO THE LEGAL SYSTEMS OF EUROPE AND LATIN AMERICA* 10 (3rd ed. 2007); EVA STEINER, *FRENCH LAW: A COMPARATIVE APPROACH* 379 (2010).

¹³² Francisco Parisi, *Entropy in Property*, 50 AM. J. COMP. L. 595, 602 (2002).

¹³³ See, e.g., R. C. VAN CAENEGEM, *AN HISTORICAL INTRODUCTION TO PRIVATE LAW* 2, 6, 17 (D. E. L. Johnston trans., Cambridge University Press 1992) (1988).

¹³⁴ Inheriting Roman law may even reduce information costs for ordinary people who may have been governed by Roman law as customary law, as was the case in Southern France.

¹³⁵ Germany, the Netherlands, and many other European countries “received” Roman law. See, e.g., W.M. Kleijn et al., *Property Law*, in *INTRODUCTION TO DUTCH LAW* 103, 109 (J.M.J. Chorus et al. eds., 2006); R. C. VAN CAENEGEM, *AN HISTORICAL INTRODUCTION TO PRIVATE LAW* 3 (D. E. L. Johnston trans., Cambridge University Press 1992) (1988).

¹³⁶ JOHN HENRY MERRYMAN & ROGELIO PEREZ-PERDOMO, *THE CIVIL LAW TRADITION: AN INTRODUCTION TO THE LEGAL SYSTEMS OF EUROPE AND LATIN AMERICA* 10 (3rd ed. 2007).

¹³⁷ See BRAM AKKERMANS, *THE PRINCIPLE OF NUMERUS CLAUSUS IN EUROPEAN PROPERTY LAW* 174 (2008).

¹³⁸ See BRAM AKKERMANS, *THE PRINCIPLE OF NUMERUS CLAUSUS IN EUROPEAN PROPERTY LAW* 173 (2008).

¹³⁹ For the influence of Roman Law on German’s BGB, see, e.g., R. C. VAN CAENEGEM, *AN HISTORICAL INTRODUCTION TO PRIVATE LAW* 156-57 (D. E. L. Johnston trans., Cambridge University Press 1992) (1988); JAMES Q. WHITMAN, *THE LEGACY OF ROMAN LAW IN THE GERMAN ROMANTIC ERA: HISTORICAL VISION AND LEGAL CHANGE*, at x (1990).

¹⁴⁰ Taiwan’s civil code was actually enacted in 1930 when the Nationalist government reigned China.

and other countries, and finally China modeled its property law after Germany's *BGB* and basically maintained the three features identified above.

Perhaps the gravity of path-dependence is too strong. Otherwise it is hard to imagine, other than preserving traditional way of thinking, why modern jurists in civil law countries do not manage to change their concept of property rights. Roman jurists developed the conceptual framework of property without taking into account mortgage, pledge, superficies, and *emphyteusis* (like a permanent leasehold).¹⁴¹ That framework, as argued above, is ill-suited for the modern world. Unlike the common law countries, in which tremendous efforts and real-world costs are required to revamp the estate system, civil law countries may not even need to change a word in their civil codes to solve the theoretical difficulties in their property law, for the three features discussed above are mainly scholarly constructions—most laymen would not even know the three features exist.

Putting the pieces together, our transaction cost theory accounts for the broad similarities and the subtler differences between common and civil law property.

The functional outlines of the two property systems are very similar, probably because of familiar reasons of purpose and possibly evolutionary pressures to serve those purposes.¹⁴² Sometimes these basic features common to many property systems are conveniently labeled and classified using the terminology or categories of Roman law.¹⁴³

This code was supposed to apply in China, and indeed did so for about two decades. Apparently, China has no Roman law tradition. But this civil code and all of the previous drafts (the first one announced in 1910, the last year of the Qing Dynasty) were influenced by German Civil Code and Japan Civil Code. Why didn't China emulate the common law? Archival work suggests that civil law was preferred by the Qing Dynasty because civil law is more centralized and thus conformed to the tastes of the ruling "mandarins." See Feng Deng, *Why China Chose the Civil Law? An Economic Analysis*, 2 PEKING U. L. J. 165 (2009) (in Chinese).

¹⁴¹ Barry Nicholas observes that superficies and *emphyteusis* "were admitted to the private law too late for any theoretical account... The lawyers of the late Empire were content to leave them simply as institutions *sui generis*." BARRY NICHOLAS, AN INTRODUCTION TO ROMAN LAW 157 (1962).

¹⁴² Even as big a proponent of the use of an idealized Roman law to attain theoretical purity as Savigny conceded that "merely theoretic considerations must give way to the actual wants of daily life." FRIEDRICH CARL VON SAVIGNY, VON SAVIGNY'S TREATISE ON POSSESSION; OR THE JUS POSSESSIONIS OF THE CIVIL LAW 404 (Sir Erskine Perry trans., 6th ed. 1979) (1848). For one famous version of the functional view, see Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347 (1967) (Papers & Proc.). On evolution, see, e.g., Armen A. Alchian, *Uncertainty, Evolution, and Economic Theory*, 58 J. POL. ECON. 211 (1950); see also Todd J. Zywicki, *The Rise and Fall of Efficiency in the Common Law: A Supply-Side Analysis*, 97 NW. U. L. REV. 1551 (2003).

¹⁴³ On the influence of Roman law in the common law tradition, including famously Blackstone, see, e.g., Alan Watson, *The Structure of Blackstone's Commentaries*, 97 YALE L.J. 795 (1988). On the *ius commune* in England, see R.H. HELMHOLZ, THE IUS COMMUNE IN ENGLAND: FOUR STUDIES (2001). For the *ius commune* in Continental Europe, see RENÉ DAVID & JOHN E.C. BRIERLEY, MAJOR LEGAL SYSTEMS IN THE WORLD TODAY 45-46 (3d ed. 1985).

Within these broad outlines, systems vary in their method or “style” of delineating property rights, as we have been discussing. For exogenous political reasons – feudalism and gradualism in the common law and Roman origins and anti-feudal Roman-based reform in the civil law – large fixed costs were incurred at specific times in the past.¹⁴⁴ Crucial to our theory is that the ability to incur these costs to effect change only happens rarely, and when it does it does not occur as part of judicial law making. Especially in property, legislatures have taken the primary role in major changes in the property system, particularly ones that have in rem effects, even in common law countries.¹⁴⁵ This is consistent with legislatures and sovereigns (e.g., William the Conqueror) rather than courts being the major innovators – they are the only ones that can effectively incur the large fixed costs. A combination of initial conditions with high fixed costs, high switching costs, and network effects sets up the possibility of path dependence.¹⁴⁶

These conditions created a style of delineation that exhibited path dependence. Style is very real from an internalist perspective, and captures the (somewhat exaggerated) differences as perceived by their respective practitioners. More easily measurable is a subset of style features: the number of property forms. Common law systems typically have a larger set of property rights and are somewhat more open-ended – they have a less strict *numerus clausus*.¹⁴⁷

With respect to the style of delineation, the two systems only allowed tinkering around the edges. In part this is a consequence of the *numerus clausus*, and in part it is the result of the institutional incapacity of courts to make major changes. In the case of

¹⁴⁴ See, e.g., PETER STEIN, *ROMAN LAW IN EUROPEAN HISTORY* 119 (1999) (“The German Romanists were not interested in tracing the way in which Roman law had been adapted to serve the needs of contemporary society... [T]hey wanted to reveal the inherent theoretical structure that was implicit in the [Roman] texts.”); R.C. VAN CAENEGEM *JUDGES, LEGISLATORS AND PROFESSORS* 82 (1987); Richard A. Posner, *Savigny, Holmes, and the Law and Economics of Possession*, 86 VA. L. REV. 535 (2000); James Q. Whitman, *The Moral Menace of Roman Law and the Making of Commerce: Some Dutch Evidence*, 105 YALE L.J. 1841 (1996).

¹⁴⁵ Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 58-68 (2000).

¹⁴⁶ See, e.g., DOUGLASS C. NORTH, *INSTITUTIONS, INSTITUTIONAL CHANGE AND ECONOMIC PERFORMANCE* 93-94 (1990); Paul A. David, *Path Dependence, Its Critics and the Quest for “Historical Economics,”* in *EVOLUTION AND PATH DEPENDENCE IN ECONOMIC IDEAS* 15 (Pierre Garrouste & Stavros Ioannides eds., 2001); Marcel Kahan & Michael Klausner, *Path Dependence in Corporate Contracting: Increasing Returns, Herd Behavior and Cognitive Biases*, 74 WASH. U. L.Q. 347, 353-55 (1996). For a skeptical view, that claims of path dependence are “some version of ‘history matters’”, see Stephen E. Margolis & S.J. Liebowitz, *Path Dependence*, in 3 *THE NEW PALGRAVE DICTIONARY OF ECONOMICS AND THE LAW* 17 (1998); S. J. Liebowitz & Stephen E. Margolis, *Path Dependence, Lock-In, and History*, 11 J.L. ECON. & ORG. 205 (1995).

¹⁴⁷ Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 8-11, 20-24 (2000); Yun-chien Chang, *Is Freedom of Property Form Principle Efficient?: Interpretations of Article 757 of the Taiwan Civil Code and the Underlying Theory*, 7 TECH. L. REV. 119 (2010) (in Chinese).

the estate system, it has been very difficult to generate interest in reforming the system and reducing the number and complexity of legal estates. Rarely does anyone find it worthwhile to incur large fixed costs of changing the style of delineation. Where it has happened, as in England, it has occurred as part of broader land law reform legislation. In civil law countries we can add the norm built into the system that the Code is the exclusive of source of legal obligation.¹⁴⁸

So what? We believe that the style of delineation, based on dominion in the civil law and on estates in the common law, is worthy of explanation in the first place. It is also, we argue, a symptom, in each case, of a lack of attention to the difference between use interests and the devices that serve them. And in certain areas, the style of delineation may have a substantive impact, as with the treatment of leases, mortgages, and the like in civil law, and German law in particular, as we have seen. To this we might add the needless complexity of the common law estate system, where it persists, and the attractiveness of the trust that allows the legal estates not to be of much practical use.

CONCLUSION

Both the common and civil law must distinguish interests in use from the often indirect devices that protect them, in order to avoid the massive transaction costs of a “complete” property system. To borrow a term from corporate law,¹⁴⁹ this is the (or at least *an*) “essential role” of property law. And the two systems respond to a variety of real world problems with similar devices. Nevertheless the path-dependence of the delineation process in the two systems – feudalism and (revived) Roman law, respectively – make the starting point and the details of delineation quite different. The lack of constituency and the generativity of the system reduce the pressure to change at this level, reinforcing the path dependence.

The result is the characteristic anomalies at the doctrinal and theoretical level in the two traditions. The idea of property as relations between persons regarding

¹⁴⁸ HENRY M. HART, JR. AND ALBERT M. SACKS, *THE LEGAL PROCESS: BASIC PROBLEMS IN THE MAKING AND APPLICATION OF LAW* 749 (William N. Eskridge, Jr. & Philip P. Frickey eds., 1994; original ed. 1958) (civil law codes are based on “a self-contained body of statutory provisions which are taken as the exclusive source of law, and to which all judicial decisions must be referred”); JOHN HENRY MERRYMAN, *THE CIVIL LAW TRADITION: AN INTRODUCTION TO THE LEGAL SYSTEMS OF WESTERN EUROPE AND LATIN AMERICA* 22-23 (2d ed. 1985) (separation of powers as formulated in civil law countries precludes doctrine *stare decisis* and judge-made law and in civil law tradition “only statutes enacted by the legislative power could be law” supplemented by administrative regulations and custom); ALAN WATSON, *THE MAKING OF THE CIVIL LAW* 168 (1981) (statutes, including foremost the code along with governmental and ministerial decrees, are the only independent source of law with a possible subordinate source of law in custom).

¹⁴⁹ Henry Hansmann & Reinier Kraakman, *The Essential Role of Organizational Law*, 110 *YALE L.J.* 387, 393-94 (2000).

resources springs naturally from the feudal property system, but the idea is not just useful in feudalism or the common law estate system. We have demonstrated that property as relations better explain the well-recognized lessor property interests, especially security interests, and the ever more prevalent propertized contracts in civil law system. On the other hand, the estate system as abetted by Legal Realism deemphasizes things to the point of obscuring the role delineation costs play in the shape of property law. Further, the common law has overlooked that not all property relations are the same. There are four prototypical property relations. Obscuring this typology has caused confusion in the literature on the essence of a property right. We argue that *in rem* status, the right to exclude, and running with assets all count as a *sine qua non* of a property right. In other words, a property right is not a bundle of rights, but a right with these three features and relates to use of some defined thing.

Harmonization of contract law and tort law has been under way on the continental (Europe, most prominently) and even the global level.¹⁵⁰ Property law, by contrast, lags far behind and is even often lacking in comparative law scholarship, owing to the ostensible gulf between common and civil law properties.¹⁵¹ By proposing a transaction cost theory that explains where the differences between civil and common law properties come from and their significance, and advancing a more sophisticated concept of property that can better depict both the common and civil law property rights, we hope to provide a platform for global comparative property law.

¹⁵⁰ See, e.g., Sief van Erp, *European Property Law: A Methodology for the Future*, in EUROPEAN PRIVATE LAW: CURRENT STATUS AND PERSPECTIVES 227, 235 (Reiner Schulze & Hans Schulte-Nölke eds., 2011).

¹⁵¹ In an important book “Toward a European Civil Code,” there are 13 chapters (about 200 pages) on contract law and 5 chapters (about 100 pages) on tort law, but just 4 chapters (about 70 pages) on property law. See ARTHUR HARTKAMP ET AL. EDS., TOWARD A EUROPEAN CIVIL CODE (2^d ed. 1998). In another book “English, French, & German Comparative Law,” there are chapters on constitutional law, contract law, tort law, etc., but no chapter on property law! See RAYMOND YOUNGS, ENGLISH, FRENCH, & GERMAN COMPARATIVE LAW (2^d ed. 2007).