

The *Numerus Clausus* Principle, Property Customs, and the Emergence of New Property Forms

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ABSTRACT: The numerus clausus debate has focused on the principle's explanatory power in the American common law, but the available theory is not as readily applicable to the civil law context. The numerus clausus principle present in the civil codes is often stricter than it is in practice—courts in several jurisdictions have allowed property customs to create new property forms. In this Essay, we advance a more general theory of optimal standardization to explain this principle in both the common law and the civil law. We also point out that the numerus clausus principle and property customs (whether they create new property forms or not) both involve an “informational trade-off”—between extensiveness of the audience and intensiveness of the conveyed message. We propose four propositions regarding whether customs would become de jure. Our study on the dynamics between the numerus clausus principle and property customs in East Asia in general, and the case study on the “small property rights” in Taiwan in particular, provide real-world evidence for these propositions.

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I. INTRODUCTION

At first glance the standardization of property forms through the *numerus clausus* principle appears to be the antithesis of spontaneous order. Under the *numerus clausus* principle,¹ the number of basic property forms is closed, and, in civil and common law systems alike, the principle pushes the ability to make changes to the property system solely to the legislature, a centralized institution.² Thomas Merrill and Henry Smith have advanced the theory that the *numerus clausus* reflects an attempt at optimal standardization based on the information costs inherent in “in rem” rights—those that cast duties on

1. See generally BRAM AKKERMANS, THE PRINCIPLE OF *NUMERUS CLAUSUS* IN EUROPEAN PROPERTY LAW 473 (2008) (describing the arguments for and against a *numerus clausus* property system); EJAN MACKAAY, LAW AND ECONOMICS FOR CIVIL LAW SYSTEMS 259 (2013) (observing that the doctrine exists in most civil law countries); Bernard Rudden, *Economic Theory v. Property Law: The Numerus Clausus Problem*, in OXFORD ESSAYS IN JURISPRUDENCE, THIRD SERIES 239 (John Eekelaar & John Bell eds., 1987) (describing the legal, economic, and other theories associated with the *numerus clausus* property system).

2. See Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 YALE L.J. 1, 59–60 (2000); Henry E. Smith, *Standardization in Property Law*, in RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW 148, 148–49 (Kenneth Ayotte & Henry E. Smith eds., 2011); *infra* Part IV.

people generally.³ Their shadow example is the American property law system, and they point to features of the common law system that reduce the frustration costs from standardizing property in the U.S., including the repeatable (recursive) nature of future interests and the flexibility of the trust.⁴ Many of these arguments in the literature, however, are not readily applicable in the civil law context. This presents a problem because any theory of *numerus clausus* has to explain why the principle persists even today—especially in civil law systems, which are home to the most explicit versions of the *numerus clausus*.⁵ Most versions of civil property law do not provide for formal future interests,⁶ and civil-law trusts are structured as contracts and are far less flexible than their common-law counterparts.⁷ Without formal and alienable future interests⁸ and trust as property,⁹ the level of recursiveness

3. See Merrill & Smith, *supra* note 2, at 8, 24–42; Smith, *supra* note 2, 157–65.

4. Merrill & Smith, *supra* note 2, at 12–24; Smith, *supra* note 2, at 152–53. A recursive rule is one that can apply to its own output. Merrill & Smith, *supra* note 2, at 36. Thus, when an interest is broken into a life estate and a remainder, the rule can apply (to the remainder) to create another life estate and a remainder, and so on. See Smith, *supra* note 2, at 148–49, 152.

5. Our optimal standardization theory does not explain the origin of the *numerus clausus* principle, but provides economic foundations for its usefulness and explains why it persists when the political reasons that motivated this principle no longer exist. It should also be worth noting that *numerus clausus* literally means “the number is closed,” but in civil law it contains an equally important connotation: the number is closed unless the legislature promulgates new forms. In other words, the legislature can at any time increase or decrease the number of the *type* of property forms, or the legislature can change the content of any form. Under the traditional understanding of this principle, no other institutions (including the courts) can create new forms or change forms. Hence, the boundary between customary property forms and legal property forms is clear: only property forms promulgated by the legislature (in civil codes or special laws) are legal; a widely used form sanctioned by courts but nowhere to be found in the books can only be customary.

6. Future interests are occasionally used in civil succession law, such as the *fidéicommis*. Such interests, however, are not conceptualized as property rights and are generally not freely alienable. For a discussion of the Taiwan law, see *infra* note 9. We thank Bram Akkermans for bringing this to our attention.

7. See, e.g., Henry Hansmann & Ugo Mattei, *The Functions of Trust Law: A Comparative Legal and Economic Analysis*, 73 N.Y.U. L. REV. 434, 440–45 (1998); Lusina Ho & Rebecca Lee, *Emerging Principles of Asian Trust Law*, in TRUST LAW IN ASIAN CIVIL LAW JURISDICTIONS: A COMPARATIVE ANALYSIS 259, 275–78 (Lusina Ho & Rebecca Lee eds., 2013).

8. See Ugo Mattei, *Efficiency in Legal Transplants: An Essay in Comparative Law and Economics*, 14 INT’L REV. L. & ECON. 3, 18–19 (1994).

9. There are substantial differences regarding the design of trust-like institution within the civil law. European countries such as France and Germany have a hard time adopting the Anglo-American trust into their own systems, and the devices they have (*fiducie* in France and *Treuhand* in Germany) are highly inadequate substitutes for the Anglo-American trust. See, e.g., CASES, MATERIALS AND TEXT ON PROPERTY LAW 553–616 (Sjef van Erp & Bram Akkermans eds., 2012) (comparing English trust, German *Treuhand*, and French *fiducie*); M.W. LAU, THE ECONOMIC STRUCTURE OF TRUSTS 75–79 (2011) (comparing common law trusts with their civil law counterparts); Valerio Forti, *Comparing American Trust and French Fiducie*, 17 COLUM. J. EUR. L. ONLINE 28, 31–33 (2010) (discussing the French *fiducie* and declaring that it falls short of the trust); George L. Gretton, *Trusts Without Equity*, 49 INT’L & COMP. L.Q. 599, 613 (2000) (stating that the German *Treuhand* falls short of the trust); John H. Langbein, *The Contractarian Basis of*

(repeating nesting of structures)¹⁰ in civil law is relatively low.¹¹ Thus, it appears, paradoxically, the existent theory for the *numerus clausus* principle is not readily able to justify the principle prevalent in civil law countries.

In this Essay, we broaden the discussions of the *numerus clausus* principle and show that different mixtures of designed order and spontaneous order are to be expected—and are found—in the area of property standardization. We argue that even after taking account of the critiques, regardless of whether recording or registration is adopted and with or without future interests and flexible trusts, the optimal standardization theory still holds. This, however, does not mean that the strict form of the *numerus clausus* principle, under which only the legislature can create new property forms, is always the best institution to attain optimal standardization. The starting points of common and civil law property are different. The common law starts with abundant (perhaps too abundant) property forms. The main problem for legislatures, courts, or transacting parties has been how to eliminate useless forms; thus, a closed system of property forms does not create a shortage of property forms. By contrast, civil law, partly because of its Roman law heritage, features far fewer forms. A strict *numerus clausus* principle would instead spell a sub-optimal number of property forms.

the Law of Trusts, 105 YALE L.J. 625, 671 (1995) (“No European legal system has a planning tool for multigenerational wealth transfer that can rival a well-designed Anglo-American estate plan, which combines the managerial strengths of the trust with the flexibility that our property law permits through future interests and powers of appointment.”). By contrast, East Asian jurisdictions such as China, Taiwan, Korea, and Japan are much more receptive to the Anglo-American trust. Trusts there are contracts, but through careful design within the civil-law paradigm, East Asian trusts functionally come close to Anglo-American trusts. See Ho & Lee, *supra* note 7, at 259–78. In at least Korea and Taiwan, the civilian property law and Anglo-American-like trust law produce an interesting choice set for estate planners: a life estate in trust can be established, while a life estate in law is not a recognizable property form. (In Taiwan, though, a life estate in law could be created by will, with remainder to heirs, but it is rarely used and the arrangement is not conceptualized as a life estate.) Trusts can even be perpetual, as there is no statutory rule against perpetuities. We thank Ying-chieh Wu for bringing this to our attention.

10. For example, the rule that a life estate can be split into a life estate and a reversion can be applied repeatedly to its own output: a life estate to A, then a life estate to B, then a life estate to C, then to O. On the concept of recursiveness, see Smith, *supra* note 2, at 152, 164–65. It is also worth noting that well-advised parties do not create legal (as opposed to equitable) life estates; the life estate at law is rare and usually arises through amateur will drafting.

11. In China and Taiwan, the *dian* right can be recursive, but *dian* is rarely used in Taiwan. See Yun-chien Chang, *The Evolution of Property Law in Taiwan: An Unconventional Interest Group Story*, in PRIVATE LAW IN CHINA AND TAIWAN: LEGAL AND ECONOMIC ANALYSES (Yun-chien Chang, Wei Shen & Wen Yeu Wang eds., forthcoming 2016) (manuscript at 15–16), available at <http://www.law.ntu.edu.tw/aslea2014/file/Evolution%20of%20Property%20Law%20in%20Taiwan%20140329.pdf>. And *dian* is intentionally not incorporated in China’s Property Law of 2007. For an introduction to *dian* in China, see Robert C. Ellickson, *The Costs of Complex Land Titles: Two Examples from China*, 1 BRIGHAM-KANNER PROP. RTS. CONF. J. 281, 286–89, 293–95 (2012); Taisu Zhang, *Property Rights in Land, Agricultural Capitalism, and the Relative Decline of Pre-Industrial China*, 13 SAN DIEGO INT’L L.J. 129, 138 (2011).

Policy makers need not and did not choose between the strict *numerus clausus* principle and the restriction-free *numerus apertus* (“open number”) principle.¹² A compromise is to allow property customs to create new, de jure property forms.¹³ Henry Smith has hypothesized that U.S. courts are more likely to recognize property customs that impose fewer information costs on third parties and will, if necessary, simplify and formalize custom in the process of adapting it into generally applicable law.¹⁴ Expanding this point here, we hypothesize courts are more likely to recognize property customs that create new property forms and impose tolerable information costs, despite the *numerus clausus* principle. Because civil law is relatively short on recursive devices and trust-like instruments, the flexibility that legally recognizing custom introduces keeps *numerus clausus* from becoming a straightjacket on property. This can be understood as the safety valve function of custom.

The *numerus clausus* and customs interact in two different dimensions. German jurisprudence usefully categorizes the former into two elements: the fixed content of forms (*Typenfixierung*) and the limited number of types of forms (*Typenzwang*).¹⁵ The fixed content part of *numerus clausus* and customs both involve the “informational trade-off” between extensiveness of the

12. In this Essay, we define both the “strict” *numerus clausus* principle and the “strict” *numerus apertus* principle narrowly. The former means only statutes can create new forms, whereas the latter means anyone can create new property forms by contracts. This non-mutually-exclusive way of defining these two terms leaves a lot of room for what we call “intermediate approach,” such as statutes plus court-sanctioned customs as duopolistic creators of new property forms. If either term should be extended to cover the bulk of the intermediate cases, we think it should be *numerus clausus*: intermediate systems mostly feature a presumption against new forms and some safety valve for creating new ones. Indeed, it could be argued that all systems—including those with a *numerus apertus*—include at least an implicit presumption against new forms and often some explicit constraint on them (e.g., recordation or registration with formalities in order to gain third-party effect).

13. Taiwan and Korea have explicitly taken this middle path. See *infra* Part IV.

14. See Henry E. Smith, *Community and Custom in Property*, 10 THEORETICAL INQUIRIES L. 5, 6–7 (2009).

15. It is not always easy to distinguish these two elements. If a civil law jurisdiction recognizes common law future interests (as customary rights), it will certainly be a breakthrough in *Typenzwang*—increasing the number of types of property forms. Court-sanctioned customary property rights, however, often work around the edges of existing forms. When the deviation is “large enough,” one could reasonably disagree as to whether the customary right tinkers with the form of an existing property right or is a new form. Such a distinction is difficult and yet practically unnecessary, as the strict *numerus clausus* principle prohibits *both*, and the optimal standardization theory has something to say on both of these margins. In this Essay, in discussing the costs and benefits of new property forms, both elements are taken into consideration. In other words, if one is to draw a marginal cost-marginal benefit figure to demonstrate the optimal standardization theory, the *x*-axis is more than the number of types of forms, but includes the complexity of contents of forms as well. For some, it would be easier to think of the costs and benefits in terms of the increase in number of types of forms. Yet the number of types of forms is discrete. The choice becomes continuous once there is the possibility of tinkering with the contents of each form.

audience and intensiveness of the conveyed message. Reaching more extensive audiences becomes more difficult with an intensive message—one that packs a lot of information into small communicative effort—because the extensive audience does not share the information necessary to decode the message. Thus, those in a close-knit community can use their own code based on their shared social context (including but by no means limited to shorthands and slang), but communication with people at a greater social or temporal distance requires more formality. Thus, for a given amount of communicative effort one has to choose between the extensiveness of the audience and the intensiveness of the message.¹⁶

Similarly, in order to be applied to all corners of the society, the fixed contents of the property forms recognized in civil codes or by the common law are only bare-bones. Under the names of, say, trusts or covenants, transacting parties can engage in an intensive, contextual arrangement. But for the arrangement to be understandable for the outside world, the settlor-trustee-beneficiary structure, or the “touch-and-concern-the-land” requirement, is the information-cost-reducing interface. Property forms that are complex and incorporate too much local knowledge would be rarely used. By the same token, highly contextual customs that originate in close-knit groups will not travel very far, while an acontextual custom is more likely to be widely adopted.

The more well-known part of the *numerus clausus* is the limited number of forms. In many civil law jurisdictions, this arguably leads to a sub-optimal number of property forms.¹⁷ Customs can be supplementary, but as detailed below, we expect that customs that strike the right informational trade-off are more likely to be recognized as new property forms.

In East Asia, lawmakers appear to sense the problem of sub-optimal standardization. First South Korea (in 1958) then Taiwan (in 2009) moved from the strict *numerus clausus* principle to a system under which both statutes and customary laws can create property forms.¹⁸ In China, although Article 5 of the Property Law of 2007 adopts the strict *numerus clausus* principle, leading Chinese property scholars all seem to agree that the number of forms

16. See Henry E. Smith, *The Language of Property: Form, Context, and Audience*, 55 STAN. L. REV. 1105, 1125–67 (2003).

17. In Taiwan and China, for example, property law recognizes neither inter vivos life estates nor residence rights (recognized in Germany). People conducting estate planning for themselves or their family members can only use lease contracts (which have only limited in rem effects). See Yun-chien Chang (张永健), *Revisiting the Debate on the Numerus Clausus Principle Versus the Numerus Apertus Principle* (再访物权法定与自由之争议), SHANGHAI JIAO TONG UNIV. L. REV. (交大法学) 119, 121 (2014).

18. In the case of Korea, see Marie Seong-Hak Kim, *In the Name of Custom, Culture, and the Constitution: Korean Customary Law in Flux*, 48 TEX. INT'L L.J. 357, 357 (2013). In the case of Taiwan, see Chang, *supra* note 11 (manuscript at 17–23).

is not airtight.¹⁹ In Japan, similarly, courts and academics are willing to recognize customary property rights.²⁰

In the final part of this Essay, a case study on Taiwan illustrates that courts are willing to overcome the *numerus clausus* principle and recognize customs if the information costs are low and the benefits of the new forms are high. Starting in the 1950s, many buildings in Taiwan have been constructed without permits and thus could not be registered in the official real estate registry. Under the Taiwan Civil Code (Article 758), however, ownership and other real rights can be de jure transferred only if they are registered. These “illegal buildings” have been the subject of transactions anyway, and in large numbers.²¹ Courts could rule that no property rights have been legally transferred; instead, through a series of precedents, the Supreme Court in Taiwan has repeatedly held that although ownership does not change hands, the buyers acquired a “right of de facto disposal,” which of course is non-existent in the civil code.²²

We argue that courts in Taiwan invented this right mainly because the information costs of doing so are low. Unlike land, possession of buildings easily can be made exclusive (by using locks, for example). Thus, verifying possession and a “right of de facto disposal” of an illegal house or an apartment in an illegal building is not very difficult, even though the right is not registered. In addition, the tax authority puts illegal buildings into the tax registry for property tax purposes,²³ and the tax registry becomes a stand-in real estate registry. Certification issued by the tax authority further reduces the information costs for transacting parties.

The rest of this Essay is structured as follows: Part II revisits the theory of optimal standardization and proposes a more accommodating version so that the theory can explain the *numerus clausus* principle in civil law; Part III expands the information cost theory of property custom; Part IV is a case study on customary property law in Taiwan that links the theoretical discussions in the first two parts together; Part V concludes.

19. See *infra* Part IV.A.

20. See, e.g., ROKUYA SUZUKI, REAL ESTATE LAW LECTURE (BUKKENHŌ KŌGI) 436 (Sobunsha 5th ed. 2007) (1964).

21. At the end of 2013, there were about 590,000 “illegal constructions” (some were entire buildings, some were just extensions) that had been reported and were awaiting demolition. See *Construction Statistical Information* (營建統計資訊), CONSTRUCTION AND PLANNING AGENCY, MINISTRY OF THE INTERIOR, TAIWAN (中華民國內政部營建署), http://www.cpami.gov.tw/chinese/index.php?option=com_content&view=article&id=7305&Itemid=102 (last visited Apr. 13, 2015).

22. For an overview of the case law, see generally 1 YUN-CHIEN CHANG (張永健), ECONOMIC ANALYSIS OF PROPERTY LAW: OWNERSHIP (物權法之經濟分析 (第一冊) —— 所有權) (forthcoming 2015).

23. See *id.*

II. OPTIMAL STANDARDIZATION THEORY REVISITED

The optimal standardization theory offered by Merrill and Smith is foundational to our discussion.²⁴ Here, we revisit three of its claims or assumptions that need further elaboration in order to better explain the *numerus clausus* principle in civil law systems: first, whether, in creating property forms, the marginal benefits decrease and the marginal costs increase, yielding an optimal number of forms where marginal benefit and marginal cost intersect; second, whether the cost of creating new property forms will be externalized under the *numerus apertus* principle; and, finally, whether the *numerus clausus* principle, the *numerus apertus* principle, or another institutional arrangement best achieves optimal standardization.

A. THE MARGINAL COST/BENEFIT CONTROVERSY

Despite being labeled an “information cost” theory, what Merrill and Smith proposed was a cost-benefit model of property forms. Under their theory, in order to get at the theoretical benchmark of optimal standardization, each additional form presents benefits that are marginally decreasing. (Having a fee simple carries with it more benefits than adding a lease, which is more beneficial than adding the next form, and so on.) Equivalently, these benefits can be characterized as avoided “frustration costs”—the costs of being frustrated by being prevented from achieving one’s objectives because of the unavailability of property form in question. On the cost side, adding more forms increases information costs. These costs include the costs for duty bearers of avoiding violations, the costs of figuring out the rights of one’s seller (verification costs), and so on. Without standardization, individuals sometimes have an excessive incentive to create new idiosyncratic property forms: they reap the benefits of the idiosyncrasy, but they do not face the costs they impose on others from making property harder to decipher. For example, one can create a contractual right to use a watch on Mondays only (or any other proper subset of days of the week), but one cannot create a property right (a watch timeshare) that would run to successors and bind third parties. Doing so might be of benefit to some transacting parties but would increase the costs of investigating any other watch for sale.²⁵ This is particularly true if transactors are allowed to introduce new dimensions of variation, thus making the features of property a set of potential unknown unknowns. This simple model is reflected in the MB–MC diagram in figure 2 of Merrill and Smith’s article.²⁶

The model is a conceptual framework and a theoretical benchmark, and Merrill and Smith assiduously avoided strong claims for optimality of the actual law. It is not a precise description of what would happen under either

24. See Merrill & Smith, *supra* note 2, at 38–42.

25. *Id.* at 26–34.

26. See *id.* at 39 fig.2.

the *numerus clausus* principle or the *numerus apertus* principle. The Merrill and Smith model suggests that any system will be pushed away from total openness or the most stringent standardization (say, by allowing one form), so that actual systems will be somewhere between these two poles. (Nevertheless, for reasons of political economy, the institutions creating property rights, most prominently legislatures, may create more or fewer than the exactly optimal number—assuming that it could be known.) This counsels against adherence either to the strictest notion of the *numerus clausus* or to the *numerus apertus*. Legislatures may, for political reasons or sheer ignorance, fail to enact one of the more socially valuable property forms. Moreover, it is possible that the more valuable property forms are created later, particularly if a dynamic model is considered. When put into a longer timeframe, the social value of some existent property forms (for example, the fee tail) decreases over time. New forms that were inconceivable or impractical emerge as highly socially valuable. That is, in a static, conceptual framework, the marginal social benefit of creating a new property form in general decreases, in the sense that potential forms can be ranged from most to least valuable. In a dynamic framework these supply and demand curves are not stable, and we should expect out-of-equilibrium behavior and entrepreneurial efforts to create new possibilities.

Henry Hansmann and Renier Kraakman, responding to Merrill and Smith, contend that there is no optimal number of property forms and what matters is whether the value created by new property forms surpasses their cost.²⁷ Their framework is more practical than conceptual. Most, if not all, jurisdictions in the world nowadays have existing property forms.²⁸ That is, for policymakers, they do not start from the 0 or 1 form on the *x*-axis; rather, their inquiry is whether to go from *N* to *N*+1 forms (*N* > 1). Following Hansmann and Kraakman, policymakers, be it a legislature or a court, should stop recognizing new property forms if the net social value of doing so becomes negative. Hansmann and Kraakman are agnostic as to whether the net social value would ever become negative.²⁹ But under modest assumptions, Hansmann and Kraakman's theory is consistent with optimal standardization theory: if the marginal value of new property forms tends to decrease,³⁰ and if the marginal cost does not decrease faster than the marginal value, the two curves will cross at some point (as marginal cost is always positive), representing an optimal solution.

What leads Hansmann and Kraakman to a looser notion of standardization (and at one point to deny the existence of an optimal number

27. See Henry Hansmann & Reinier Kraakman, *Property, Contract, and Verification: The Numerus Clausus Problem and the Divisibility of Rights*, 31 J. LEGAL STUD. 373, 3401 (2002).

28. World Property Law Database (compiled by Yun-chien Chang) (on file with author).

29. Hansmann & Kraakman, *supra* note 27, at 3400–01.

30. This is likely to be true unless the legislature or the market continues to do a terrible job or the institutional environment keeps changing.

of property forms at all³¹) is their focus only on certain types of verification costs and their inattention to other types of information and transaction costs, such as the system and administrative cost of revising tax and other laws in order to accommodate new property forms. They recognize that notice is costly, but, in their view, once a system of notice—such as a registry—is worth providing for a new property form, any further idiosyncrasy can be given in rem effect at no extra cost.³² This assumes that some form of standardization is not valuable for potential violators and transactors of property rights. This too is an empirical question.

More fundamentally, the reason that idiosyncrasy does not have a greater impact on third parties is a result of the *numerus clausus* in an extended sense. Standardization in property includes the notion that the right can be tweaked only in an “internal” way. Imagine a law of possession where owners could declare idiosyncratic consequences for violation. Moreover, the fact that creating property rights is a matter of “subtraction” is likewise a design feature of the system—one that is explicit in South African law with its ostensible *numerus apertus*.³³

Hansmann and Kraakman also assume implicitly and without justification that a standard format, even for registered rights, either has no value or will emerge spontaneously. It is worth noting that even systems with definitive registration, which provide the most robust form of notice of the state of title, often combine registration with a strict *numerus clausus*. Germany is a prime example.³⁴ If the *numerus clausus* were simply a poor way of addressing the verification cost problem, it is puzzling that it dovetails with strict registration.

We claim that for the optimal standardization theory to stand, the marginal cost need not increase as Merrill and Smith assumed; instead, the marginal cost can remain constant at a positive amount or decrease more slowly than the marginal benefit. How the marginal cost of creating new

31. Hansmann & Kraakman, *supra* note 27, at S401.

32. *See id.* at S416.

33. *See* C.G. VAN DER MERWE & M.J. DE WAAL, THE LAW OF THINGS AND SERVITUDES ¶ 46 (1993); M.J. de Waal, *The Uniformity of Ownership, Numerus Clausus and the Reception of the Trust into South African Law*, 8 EUR. REV. PRIVATE L. 439, 442–44 (2000); Hanri Mostert & Leon Verstappen, *Practical Approaches to the Numerus Clausus of Land Rights: How Legal Professionals in South Africa and the Netherlands Deal with Certainty and Flexibility in Property Law*, in MODERN STUDIES IN PROPERTY LAW (Warren Barr et al. eds., forthcoming 2015).

34. Benito Arruñada, *Property Enforcement as Organized Consent*, 19 J.L. ECON. & ORG. 401, 416–23 (2003). Carol Rose points out that the *numerus clausus* principle and notice are supplementary, and registration functions *ex ante*, whereas recording functions *ex post*. *See* Carol M. Rose, *Servitudes*, in RESEARCH HANDBOOK ON THE ECONOMICS OF PROPERTY LAW, *supra* note 2, at 296, 306–07.

property forms changes has been controversial, at least in the law and economics literature written in Chinese.³⁵ Below we address this issue.

The changes in marginal costs of creating new property forms differ in jurisdictions with registration and recording systems of real estate.³⁶ Marginal costs in this discussion consist of “measurement costs” and “administrative costs”³⁷—the former include the information costs for potential transacting parties to verify titles (verification costs) whereas the latter are the expenses related to operating and maintaining the registry.³⁸

Under the registration system, the marginal administrative costs tends to increase because the registrar has to substantively review whether the filed registration request conflicts with any existent lesser property interests under current law, and the more numerous the property forms are, the more difficult it is for the registrar to review. Even if the number of forms is not correlated with the difficulty of review, the marginal administrative cost is still a constant, positive number. For users of the registration information, the marginal measurement costs at best remain constant at a positive (but low) number and tend not to decrease. In short, the total marginal cost under the registration system will not decrease and, if anything, will increase.

Under the recording system, the marginal administrative cost is close to zero, as the contents of the deeds do not affect the way they are indexed. By contrast, the marginal measurement cost increases. Compare two worlds, one with only eight property forms while the other has 80 property forms. The cost of conducting title searches in the former must be lower than that in the latter, as the contents of any deed in the latter world are much more difficult to ascertain. In addition, an open-ended set of forms might lead to even costlier search. Consequently, the marginal cost tends to increase.

B. THE EXTERNAL COST OF THE NUMERUS APERTUS PRINCIPLE

The *numerus apertus* principle, the opposite of the *numerus clausus* principle, provides that the number of property forms is open.³⁹ As Merrill

35. See, e.g., Yeong-Chin Su (苏永钦), *Freedom of Transaction for Goods That Can Be Registered* (可登记财产利益的交易自由), 16 NANJING UNIV. L. REV. (南京大学法律评论) 91 (2010); Yeong-Chin Su (蘇永欽), *Reconsidering the Numerus Clausus Principle: From the Perspectives of Economic Analysis and the Development of Property Law* (物權法定主義的再思考—從民事財產法的發展與經濟觀點分析), 19 TAIWAN ECON. REV. (經濟論文叢刊) 219 (1991).

36. For a comparison of recording and registration, see BENITO ARRÚNADA, *INSTITUTIONAL FOUNDATIONS OF IMPERSONAL EXCHANGE: THEORY AND POLICY OF CONTRACTUAL REGISTRIES* 132–67 (2012).

37. See Hansmann & Kraakman, *supra* note 27, at S396–97. Hansmann and Kraakman call it “system cost.” See *id.*

38. See Merrill & Smith, *supra* note 2, at 26 & n.107, 51.

39. The *numerus apertus* principle may or may not require notice. Supporters of this principle in the Chinese literature deny that the costs of new property forms need be externalized, as notice can be required. See, e.g., Tze-Shiou Chien (簡資修), *The Problem of Right In Rem Externality* (物權外部性問題), 8 ACADEMIA SINICA L.J. (中研院法學期刊) 229 (2011).

and Smith suggest, the problem with this principle is that part of the costs is externalized; thus the market will produce too many property forms.⁴⁰ It is worth emphasizing that the debate on externality has nothing to do with the optimal standardization theory. No matter whether the costs are internalized or externalized, they are still social costs. Whether the cost of creating new property forms is externalized instead concerns whether the *numerus clausus* principle, the *numerus apertus* principle, or another institutional arrangement is most likely to achieve optimal standardization. Indeed, if the creator of new property forms internalizes all the costs, the *numerus clausus* principle can hardly be justified. Market participants know better than the legislature what their private (and social) costs entail. Whatever forms they conceive and use will benefit them and the society as a whole. The externality problem would be exactly the opposite: as part of the social value of creating a new form would be externalized, should policymakers consider subsidizing the creation of new property forms? In short, with no external cost, the *numerus apertus* principle would be more efficient than the *numerus clausus* principle, which could impede a number of socially efficient forms.

With external costs, the *numerus apertus* principle is not necessarily the best institutional arrangement to realize optimal standardization. Merrill and Smith point out “that the *numerus clausus* strikes a rough balance between the extremes of complete regimentation and complete freedom of customization.”⁴¹ If there is such a rough balance, the common law system probably errs on the side of too many forms. As many have pointed out, there seems to be little value in having multiple defeasible fees with an elaborate set of corresponding future interests.⁴² In practice, most transacting parties simply ignore most forms or employ trusts to achieve their objectives. Consequently, the *numerus clausus* principle does not frustrate many dealmakers. By contrast, civil law systems err on the side of too few forms. In many civil law countries, the legislature spells out only a handful of lesser property interests, and, recall, no future interest and property-form trust are recognized.⁴³ Thus, the starting point for civil property scholars is the insufficient number of property forms under the *numerus clausus* principle. Even though the *numerus apertus* principle may not produce an optimal number of property forms, it may not be less efficient than the *numerus clausus* principle, under which one could produce too many, whereas the other arguably has enacted too few. Hence, the key and initial question is whether

40. See Thomas W. Merrill & Henry E. Smith, *What Happened to Property in Law and Economics?*, 111 YALE L.J. 357, 386–87 (2001); Merrill & Smith, *supra* note 2, at 26–28.

41. See Merrill & Smith, *supra* note 2, at 40.

42. See T.P. Gallanis, *The Future of Future Interests*, 60 WASH. & LEE L. REV. 513, 515–20 (2003); Lawrence W. Waggoner, *Reformulating the Structure of Estates: A Proposal for Legislative Action*, 85 HARV. L. REV. 729, 732 (1972).

43. See Bram Akkermans, *Standardization of Property Rights in European Property Law*, in PROPERTY LAW PERSPECTIVES II 221, 232–35 (Bram Akkermans et al. eds., 2014).

and how much costs are indeed externalized under the *numerus apertus* principle. Three types of costs might be externalized: measurement costs to avoid infringing others' rights, measurement costs to verify title,⁴⁴ and administrative costs. We discuss them in order.

Measurement costs to avoid infringement would not be the biggest issue in terms of externalities, at least given how property works. In general, one only needs to know that she does not have a right to certain properties to avoid infringing others' rights—no matter who owns them. One could imagine the system working differently. Merrill and Smith offer an example to illustrate how this type of cost could be greater than it typically is: Adrian establishes a public easement on his land, so everyone is free to roam except someone who wears an orange coat—the latter will be sued for trespassing.⁴⁵ In this world, every driver or pedestrian has to verify whether her outfit or other manners violate the reservation clause of a seemingly public road. The cost is not entirely internalized by Adrian, even when he is required to give proper notice. That being said, it is difficult to come up with many realistic examples.⁴⁶ The task of avoiding violations is nevertheless made easier because complex licenses are, as noted earlier, internal and subtractive, and they key off the boundaries around things. Trespass law thus can be kept relatively simple, with violations tracking those boundaries in an on or off fashion. Hence, external costs of creating property forms do exist but may not be significant in practice. The question remains how many bizarre rights would be created in the absence of mandatory standardization (whether through *numerus clausus* of property forms or through the basic mandatory architecture of property law) and how much of a chilling effect those idiosyncratic rights would impose on actors generally.

44. See *id.* at 226.

45. See, e.g., Thomas W. Merrill & Henry E. Smith, *The Property/Contract Interface*, 101 COLUM. L. REV. 773, 795–96 n.77 (2001).

46. As it turns out, we found a real-world example from Taiwan. According to a United Daily News report on January 10, 2015, four tourists followed a sign stating “open for orange picking” to an orange farm. *Open for Orange Picking? (開放採柑? 跟著箭頭走 4 遊客被當)*, UDN.COM (Jan. 10, 2015), <http://udn.com/news/story/7318/633450-%E9%96%8B%E6%94%BE%E6%8E%A1%E6%9F%91%E6%BC%9F%E8%B7%9F%E8%91%97%E7%AE%AD%E9%A0%AD%E8%B5%Bo-4%E9%81%8A%E5%AE%A2%E8%A2%AB%E7%95%B6%E8%B3%8A>. The owner of that farm is a retired professor who opens up his farm to friends and relatives, but not to others, to pick oranges for free. The owner did not post the sign. The tourists asked the first person they met in the farm whether they could also pick some oranges. That person gave a positive answer. With a dozen kilograms of oranges in their hands, the owner caught them and sent them to the police, notwithstanding the tourists' instant apology and offer to pay fair market value. In this real-world scenario, there is no orange coat, but there are oranges (what a coincidence!). The owner licenses and gives profit rights to a group of not-so-well-defined friends and relatives. The tourists trespassed but, it seems to us, conducted reasonable verification in following a sign and asking a fruit picker. Still, they were treated as thieves, at least for a couple of hours. For them, the measurement costs of avoiding others' property rights are apparently larger than zero.

The case of verification costs is more immediately important and more complicated than the measurement costs to avoid infringement. Under the registration system, as long as the contents of the new property forms are registered, potential transacting parties who check the registry would not need to pay more attention or spend extra effort in verifying, except to the extent that verifying unfamiliar rights might be more costly—this might well hold true of the registrar upon whom falls much of the burden of verification. Thus, under registration, verification costs are for the most part not externalized to future transactors. Under the recording system, new property forms can only be found in deeds regarding real property with such forms. Transacting parties who are interested in real property with old forms do not have to pay extra attention or incur cost because a certain new form has been created. (Again, this only works as long as one can really be sure one is dealing with the older form and not a confusingly similar newer one.) So no verification cost is externalized on the margin.

Note, however, that transferring from the *numerus clausus* principle to the *numerus apertus* principle increases permanently fixed measurement costs under the recording system. More specifically, under the *numerus clausus* principle, if potential buyers find a “fancy” in a prior deed, they can consider it as invalid or as one of the stipulated forms, depending on the jurisprudence of the court.⁴⁷ By contrast, under the *numerus apertus* principle, if the deed fails to use standardized wording or is ambiguous even in minor ways, potential buyers would worry whether a fancy or an established form was used and would verify further. The measurement cost is a fixed cost because it arises from changes in institutions and barely increases on the margin when more and more new forms are created. Without externalized marginal costs, this type of fixed measurement cost does not make the *numerus apertus*

47. For a discussion of how courts in states that disallow the fee tail will treat an attempt to create one as giving rise to a fee simple or a life estate, see THOMAS F. BERGIN & PAUL G. HASKELL, PREFACE TO ESTATES IN LAND AND FUTURE INTERESTS 32–33 (2d ed. 1984). The invalidation of a future interest requires something to fill the gap it leaves. See *City of Klamath Falls v. Bell*, 490 P.2d 515, 518 (Or. Ct. App. 1971); see also THOMAS W. MERRILL & HENRY E. SMITH, PROPERTY: PRINCIPLES AND POLICIES 518–31 (2d ed. 2012) (discussing the “Conservation of Estates”). At the margins, where the (unstated) *numerus clausus* operates in the common law, courts have forced devices like a lease “for the duration of the war” into one of the recognized categories of leases (usually, tenancy at will). See *National Bellas Hess, Inc. v. Kalis*, 191 F.2d 739, 739 (8th Cir. 1951); *Stanmeyer v. Davis*, 53 N.E.2d 22, 24–25 (1944); *Lace v. Chantler*, [1944] K.B. 368; *Merrill & Smith*, *supra* note 2, at 11–12. Occasionally a court will redefine the term of years to allow for such a lease. *Smith’s Transfer & Storage Co. v. Hawkins*, 50 A.2d 267, 268 (D.C. 1946). Likewise, courts usually interpret a “lease for life” as a tenancy at will or a periodic tenancy. Compare *Thompson v. Baxter*, 119 N.W. 797 (Minn. 1909) (life estate), with *Nitschke v. Doggett*, 489 S.W.2d 335 (Tex. Civ. App. 1972) (tenancy at will), *vacated on other grounds*, 498 S.W.2d 339 (Tex. 1973), and *Kajo Church Square, Inc. v. Walker*, No. 12-02-00131-CV, 2003 WL 1848555 (Tex. App. Apr. 9, 2003) (same). In one famous case, *Garner v. Gerrish*, 473 N.E.2d 223 (N.Y. 1984), the court upheld such a lease. Interestingly, recent scholarship shows that the court was badly mistaken about the nature of the relationship and that its opinion probably allowed the tenant to get away with an abuse of a confidential relationship. See generally *Bernie D. Jones, Garner v. Gerrish and the Renter’s Life Estate: Teaching a New Concept of “Home,”* 2 FAULKNER L. REV. 1 (2010).

principle an inferior option to the *numerus clausus* principle in producing an optimal number of forms. Nonetheless, this fixed cost (incurred only under the *numerus apertus* principle) reduces the number of transactions and thus decreases social welfare.

As for administrative costs, under the registration system, they can hardly be completely internalized (the institutional cost of internalization is not zero!).⁴⁸ Under the recording system, with (near) zero marginal administrative cost, there is little or no externality problem. Note that administrative costs, broadly defined, are not simply concerned with notice of real rights, but include costs of other legal regimes such as tax. For instance, in countries with inheritance taxes and land transaction taxes but currently without property forms such as life estate, allowing at-will creation of new forms would lead to changes in various tax regimes when a myriad of life estate are used. Another example would be the impact of recognizing cooperative apartments on corporate law, bankruptcy law, mortgage law, and tax law. These administrative costs can barely be internalized.

C. THE NUMERUS APERTUS PRINCIPLE IN ACTION

To what extent the *numerus apertus* principle imposes external information costs on third parties depends on how the *numerus apertus* principle is realized in law. Put differently, is the *numerus apertus* principle anything other than the *numerus clausus* principle? Or is the *numerus apertus* principle just a polar opposite to the *numerus clausus* principle with other institutional arrangements between them? In the civil law context, the *numerus clausus* principle can be translated as only statutes can create new property forms. But what is the domain of the *numerus apertus* principle? Does the *numerus apertus* principle mean “any person or institution can create new property forms without constraints” or “certain institutions (such as courts) or mechanisms (such as custom) can create new property forms, with certain notice requirements”? If the restriction-free *numerus apertus* principle is adopted, and any party can create new property forms by contract (even without recording the contract),⁴⁹ the externality is high. By contrast, the externality is low if the said arrangement has to become customary first and only then will the court sanction the new property forms, with recording or registration requirements. As noted above, we define the *numerus apertus*

48. See generally Yun-chien Chang, *Optional Law in Property: Theoretical Critiques*, 9 N.Y.U. J.L. & LIBERTY (forthcoming 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2351651; Harold Demsetz, *The Problem of Social Cost: What Problem? A Critique of the Reasoning of A. C. Pigou and R.H. Coase*, 7 REV. L. & ECON. 1 (2011); Lee Anne Fennell, *The Problem of Resource Access*, 126 HARV. L. REV. 1471 (2013).

49. One example of trying to create (quasi-)property rights by contract comes from Taiwan, where real estate developers, when assembling land, often sign option contracts with landowners, stipulating that developers are entitled to purchase the real properties at X dollars before Y date. The contract also includes a “bind-the-relative” clause that prescribes that the spouse, children, parents, and other close relatives are also bound by this contract.

principle narrowly (as restriction-free); thus, the first-customary-then-sanctioned approach is “intermediate” in our usage.

Creating new property forms by custom and purely by judicial creation are different, though often conflated. The former means that as long as there is a wide practice of certain transactions and the two parties intend the transactions to be in rem, courts have to recognize them as (new) property forms. The latter means that courts can reify any transaction, even though it is the first time courts at any level have faced this kind of deal. Intermediate approaches include requiring the new form to be customary first but giving courts some discretion as to whether to allow it into the set of legally recognized forms.

Not all jurisdictions purport to follow the *numerus clausus* principle. As a result, it is worthwhile to examine the *numerus apertus* principle in action. Spain, Scotland, South Africa, and a few Nordic countries, for example, have adopted the *numerus apertus* principle. In Spain and Scotland, even though the *numerus clausus* principle is not formally recognized, no new property rights have been recognized since 1840.⁵⁰ South Africa, by contrast, has a more vibrant culture of creating new rights. There, a new form is effective only if registered.⁵¹ Disputes go to (South African) court, which has laid out tests to determine which rights are un-registerable contractual, personal rights and which rights are registerable property rights.⁵² South Africa, thus, has adopted an intermediate approach, under which judicial approval and registration are necessary conditions for creating new property forms. There is no large increase in property forms in South Africa because of the *numerus apertus* principle.⁵³

Under one interpretation of French law, the civil code does not prohibit parties from creating new property forms,⁵⁴ but property forms must be recorded in order to have an in rem effect.⁵⁵ Under this view, these requirements for recordation impose a degree of standardization.⁵⁶ The set

50. See AKKERMANS, *supra* note 1, at 473 n.491.

51. See *id.* at 474–75.

52. See *id.* at 477 (observing that “for a right to be registrable, it must be the intention of the parties to bind not only themselves but also their successors in title, and the nature of the right or condition must be such that registration of it results in a subtraction from the *dominium* of the land against which it is registered”); see also de Waal, *supra* note 33, at 442–44.

53. See AKKERMANS, *supra* note 1, at 482.

54. See *id.* at 167–68 (summarizing the scholarly debate about the interpretation of Civil Code art. 543 and the *numerus clausus* principle).

55. See Akkermans, *supra* note 43, at 229–31.

56. 3 MAURICE PICARD, TRAITÉ PRATIQUE DE DROIT CIVIL FRANÇAIS: LES BIENS [TREATISE ON FRENCH CIVIL LAW: PROPERTY] § 3, ¶ 48, at 54–55 (Marcel Planiol & Georges Ripert eds., 2d ed. 1952) (arguing that French civil code does not prohibit the creation of new forms of property but makes it difficult through limits on in rem enforcement, antifragmentation devices, and requirements of publicity). Others have traditionally seen Article 543 of the code as imposing a *numerus clausus* directly. See ÉMILE CHÉNON, LES DÉMEMBREMENTS DE LA PROPRIÉTÉ FONCIÈRE EN FRANCE AVANT ET APRÈS LA RÉVOLUTION [THE DIVISION OF LANDHOLDINGS IN FRANCE BEFORE AND

of in rem forms is standardized, in that it is difficult to achieve in rem effect for new idiosyncratic forms. There are indeed instances in which the French law recognizes customary property rights, but only occasionally. In France, the code left out the *emphyteusis* (a durable use right in the land of another usually for building or agricultural purposes) but courts later allowed it.⁵⁷ The information costs of doing so were lower than they would have been if it had not formed a part of the Roman law upon which the codes were based.⁵⁸ And because *emphyteusis* had some historical status, the information costs of reintroducing it were correspondingly lower. Finally, there is a possible trend in France in the last couple of years of judicial recognition of new property forms. In 2012, one decision permitted a perpetual use right (roughly an easement in gross) where the code allowed one only for life while another blessed a longstanding right to use the trees on another's land.⁵⁹ Whether these should be regarded as entirely new forms or tweaks to old ones is a matter of interpretation; perhaps the best view is that the *numerus clausus* in jurisdictions like France sets up very general modular forms, and the courts are allowed to tinker around the edges of these in light of who—successors in interest, those who encounter the right, or other market participants—is informationally and substantively impacted.⁶⁰

In sum, regardless of whether recording or registration is adopted, creating new property forms externalizes costs to potential third parties or the general taxpayers. The restriction-free *numerus apertus* principle thus does not necessarily produce an optimal number of property forms. But the same can be said of the strict *numerus clausus* principle, at least in civil law countries. This is because these countries generally have fewer property forms, and these

AFTER THE REVOLUTION] ¶ 60, at 180–83 (2d ed. 1923); S. GINOSSAR, DROIT RÉEL, PROPRIÉTÉ ET CRÉANCE: ÉLABORATION D'UN SYSTÈME RATIONNEL DES DROITS PATRIMONIAUX [REAL RIGHTS, PROPERTY AND DEBT: DEVELOPMENT OF A RATIONAL SYSTEM OF PROPERTY RIGHTS] 146–51 (1960).

57. Note that in 1902, more than 100 years after the French Civil Code abolished *emphyteusis*, another code, *Code rural*, recognized this form again. See AKKERMANS, *supra* note 1, at 133.

58. Moreover, when the demand for such a form increases, there is a reason to allow it dynamically onto the list, classically through legislation, more loosely through judicial recognition. Thus, the claim that the “information cost” theory has no way to explain the elimination and reintroduction of such forms, see Anna di Robilant, *Property and Democratic Deliberation: The Numerus Clausus Principle and Democratic Experimentalism in Property Law*, 62 AM. J. COMP. L. 367, 396 (2014), is incorrect on both the cost and the benefit side of the ledger. It is the case, though, that the evolving costs and benefits of any form present tricky empirical issues. Absolute cost minimization would be achieved with one (or zero) property forms, but the theory of optimal standardization is based on set-up costs and marginal costs and benefits of recognizing new property forms.

59. Akkermans, *supra* note 43, at 229–31.

60. *Id.*

forms are less flexible than common-law property forms. Taken together, the number of property forms is probably smaller than the optimal number as determined by the optimal standardization theory. The property system, therefore, might operate in an inefficient state. Hence, the key issue boils down to the question of which institutional arrangement is the second best. We have reformulated the debate between the strict *numerus clausus* principle and restriction-free *numerus apertus* principle in this Part. Parts III and IV will analyze how an in-between institutional arrangement—statutes plus customs—may be a superior choice in realizing optimal standardization.

III. THE INFORMATION COST THEORY OF CUSTOMS IN PROPERTY

Allowing custom as a source of law is often the first step in loosening the *numerus clausus*. Property forms not on the approved finite list are supposed to be disallowed under the classic *numerus clausus*, and yet, in some systems, custom seems to be able in some instances to add to the list. When a court recognizes a property custom, this contradicts the institutional choice side of the *numerus clausus*: the classic principle reserves change in the menu of property rights to the legislature.⁶¹ Under this classic approach, courts are meant to abstain from recognizing new property forms, and yet a generous approach to custom is a way around the preference under the *numerus clausus* for legislative over judicial change in the realm of basic property rights.

Various informational considerations—the formalization by legal institutions, existing widespread familiarity of the form, and similarity to the broad outlines of existing forms—can be true of custom as a possible source of property rights. For custom to play some role in the law of property is not necessarily inconsistent with an information cost theory of the *numerus clausus*. In this Part, we build on the informational theory of custom to show how the relationship of custom and the *numerus clausus* can be captured.

A. THE INFORMATIONAL TRADE-OFF

Law achieves its benefits at some cost. Legal relations, including property rights, have to be delineated, communicated, and understood by duty bearers and officials. In a zero transaction cost world, the benefits of any idiosyncratic in rem right could be achieved at zero cost. Thus, if an owner's purposes required a property right in Blackacre that carried with it a duty for others—even others generally—to look at Blackacre from outside, the relevant consents and understandings could be achieved through “Coasean” bargains at zero transaction cost (wealth effects not counting).⁶² Or complex divisions of property rights, even if unprecedented, could be given in rem effect because the fear that third parties would have increased search costs would

61. Merrill & Smith, *supra* note 2, at 58–68.

62. Brian Angelo Lee & Henry E. Smith, *The Nature of Coasean Property*, 59 INT'L REV. ECON. 145, 152–54 (2012). See generally R.H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 7 (1960).

not be well founded. Likewise, idiosyncratic customs could be given in rem effect when their benefits exceed their costs because duty holders would understand them costlessly—and could be compensated for the burden, if that matters.

Despite the shorthand “information cost” theory, the informational theory of property rights is a cost–benefit theory that incorporates both the costs and the benefits of communication. The frustration costs mentioned earlier are the benefits foregone because the *numerus clausus* disallows a particular desired property right (or denies it in rem effect).⁶³ Communication in the law is but one form of communication, and it is subject to the same trade-offs as communication in general.

One of these trade-offs, common to all communication, has to do with the optimal level of formality.⁶⁴ People communicate differently with different audiences. When the speaker and the hearer share a lot of background knowledge, communication can be briefer and more informal—that is, more information can be packed into less communicative effort. Thus, people use more formal language with more socially distant audiences.⁶⁵ On a micro level, it is possible to rely on pragmatic inferences such as taking “It’s cold in here” to be a request to close the window.⁶⁶ The speaker would have to use more formal requests with someone who, for example, was unfamiliar with windows. In general, the more intimate the audience, the more one can rely on common knowledge to save communicative effort. Part of this saving is achieved by relying more on common knowledge of context.

In general, formalism can be defined as relative invariance to context.⁶⁷ Everyday speech is less formal than a written address, and the notation of a proof is more formal than the everyday notation of mathematicians, because the more formal varieties of communication rely less on background context to fill in information. But there are limits: in any useful system, some context must be used and context is required for basic definitions. The questions about context are when and how much. This is where the in rem aspect of property comes in. The audience reached by an in rem right is wider and more impersonal than for an in personam right.⁶⁸

63. Merrill & Smith, *supra* note 2, at 35–40.

64. See Smith, *supra* note 16, at 1148–57.

65. Jean-Marc Dewaele, *How to Measure Formality of Speech? A Model of Synchronic Variation*, in *APPROACHES TO SECOND LANGUAGE ACQUISITION* 119, 119–31 (Kari Sajavaara & Courtney Fairweather eds., 1996); see also Jean-Marc Dewaele, *Style-Shifting in Oral Interlanguage: Quantification and Definition*, in *THE CURRENT STATE OF INTERLANGUAGE: STUDIES IN HONOR OF WILLIAM E. RUTHERFORD* 233, 233–38 (Lynn Eubank et al. eds., 1995); Smith, *supra* note 16, at 1135.

66. PAUL GRICE, *Logic and Conversation*, in *STUDIES IN THE WAYS OF WORDS* 22, 26 (1989).

67. Francis Heylighen, *Advantages and Limitations of Formal Expression*, 4 *FOUND. SCI.* 25, 27, 49–53 (1999); Smith, *supra* note 16, at 1112–13, 1135–36.

68. Merrill & Smith, *supra* note 45, at 783; Smith, *supra* note 16, at 1139–57.

Formalism and contextualism are along a spectrum and subject to a trade-off. The benefits of communication can only be achieved by reaching an audience, and some audiences are more costly to reach than others. The basic informational trade-off governs all communication: at the same cost one can communicate with a large and indefinite audience in a formal way or with a closer audience in a more elliptical way that depends on filling in information from the context.⁶⁹ In other words, reaching a wider audience either requires more effort at education, or making the message less context-dependent. Think of those running hospitals trying to prevent wrong-site surgery.⁷⁰ Is it better to write “yes” on the correct leg to operate on or “no” on the wrong one? If doctors are educated to look for “yes,” this is a good message. If they are not aware of the system, the “no” might be better, even though it might require some checking as to whether the other side should be operated on. One might also use both labels at an even greater cost.

B. CUSTOM AND INFORMATION

Custom is subject to this same informational trade-off between extensiveness of the audience and intensiveness of the message.⁷¹ The information theory predicts that custom should be easier to incorporate into the law when the benefits are great—the custom uniquely solves an important problem—and when it is less costly. Cost could be low because the custom already accords with widespread knowledge or even unlearned salience. Alternatively, legislatures and courts can strip down and formalize the custom if it is to be applied in a more in rem fashion—to bind the world at large and not just the community in which it originated.

To examine the first cost-economizing strategy—employing customs that are either already widespread or tapping into widely shared knowledge—consider possession. Possession derives in part from custom and continues to draw on everyday knowledge. What counts as possession often relies on salience and focal points that are to some extent cross-cultural.⁷² It makes sense for a legal system then to adopt these widely shared notions of possession based on everyday ideas of control and proximity into the law—and to build a structure on top of them.⁷³ Even so, where the claim must be

69. Smith, *supra* note 16, at 1125–67.

70. *Id.* at 1138–39; Jennifer Steinhauer, *So, the Tumor Is on the Left, Right?; Seeking Ways to Reduce Operating Room Errors*, N.Y. TIMES (Apr. 1, 2001), <http://www.nytimes.com/2001/04/01/Nyregion/so-the-tumor-is-on-the-left-right-seeking-ways-to-reduce-operating-room-errors.html>.

71. Smith, *supra* note 14, at 6–7 (“Custom is subject to a general communicative tradeoff: all else being equal, customs that are demanding from an informational standpoint require an audience with a high degree of common knowledge.”).

72. Robert C. Ellickson, *The Inevitable Trend Toward Universally Recognizable Signals of Property Claims: An Essay for Carol Rose*, 19 WM. & MARY BILL RTS. J. 1015, 1022–32 (2011).

73. See, e.g., Yun-chien Chang, *The Economy of Concept and Possession*, in LAW AND ECONOMICS OF POSSESSION 103 (Yun-chien Chang ed., 2015); Henry E. Smith, *The Elements of Possession*, in LAW AND ECONOMICS OF POSSESSION, *supra*, at 65.

respected outside a close-knit community, we should expect customs to be more formal in order to be easier to understand by those lacking a lot of common knowledge with the claimant. Which brings us to formalization.

A good illustration of the second strategy—formalizing and standardizing custom before allowing it more in rem effect—comes from mining law in the United States.⁷⁴ Both statutes and judicial opinions have adopted the customs of the mining camps into the law. What counts as discovery and location, how to mark boundaries, and the like, trace back to customs.⁷⁵ Nevertheless, the law did not adopt these customs wholesale. The customs themselves showed some commonalties from camp to camp, partly because many of the miners shared a common background and partly because members of a camp wanted to make their claims clear to outsiders.⁷⁶ When these customs were taken up into the law, they were adapted, not just adopted: the customs were formalized and standardized. Courts did not simply enforce idiosyncratic customs camp by camp, even when the Mining Act of 1872 incorporated custom by reference.⁷⁷ Instead, simplification, formalization, and standardization were part of the process. For example, in the camps, miners had a right as against other miners to work a “spot” before discovery without being disturbed by others.⁷⁸ What constituted a “spot” was fuzzy and depended on contextual knowledge that could be presumed among the other miners in a camp (and those who would join later).⁷⁹ When this custom became the legal doctrine of “*pedis possessio*,” the boundary of a spot was identified with the boundary of a claim.⁸⁰ This boundary is much more formal and explicit and, crucially, easier for outsiders, including judicial officials, to parse. Nor is this some inexorable expansion in the scope of the doctrine. Recently, uranium mining companies have tried to get the courts, with little success, to allow work requirements for the *pedis possessio* to extend beyond one claim; the nature of exploration for uranium makes it wasteful to have to maintain work on each of a group of adjacent claims.⁸¹ Courts have rejected

74. Smith, *supra* note 14, at 32–34.

75. *See id.* at 31–32 (quoting *Morton v. Solambo Copper Mining Co.*, 26 Cal. 527, 532–33 (1864)).

76. Andrea G. McDowell, *From Commons to Claims: Property Rights in the California Gold Rush*, 14 YALE J.L. & HUMAN. 1, 3–4, 7–9 (2002). *See generally* MARK KANAZAWA, GOLDEN RULES: THE ORIGINS OF CALIFORNIA WATER LAW IN THE GOLD RUSH (2015).

77. 30 U.S.C. § 22 (2012); *see also* Smith, *supra* note 14, at 31–32 (quoting and discussing *Morton*, 26 Cal. at 532–33).

78. Smith, *supra* note 14, at 33; *see also* *Union Oil Co. v. Smith*, 249 U.S. 337, 347–48 (1919); William J. Forman et al., *Judicial Uncertainties in Applying the Mining Doctrine of “Pedis Possessio,”* 3 NAT. RESOURCES L. 467, 467–69 (1970).

79. *See generally* Forman et al., *supra* note 78.

80. *Field v. Grey*, 25 P. 793, 794 (Ariz. 1881); *Miller v. Chrisman*, 73 P. 1083, 1086 (Cal. 1903), *aff’d*, 197 U.S. 313 (1905); James M. Finberg, *The General Mining Law and the Doctrine of Pedis Possessio: The Case for Congressional Action*, 49 U. CHI. L. REV. 1026, 1036 (1982); Smith, *supra* note 14, at 33.

81. Smith, *supra* note 14, at 33–34.

this gambit,⁸² and a lower court's stray attempt to adapt the *pedis possessio* to this new situation has been criticized for being hopelessly indeterminate.⁸³

C. THE INSTITUTIONS OF INFORMATION

Custom and the *numerus clausus* are both examples of the very same informational trade-off. When one is communicating with a wide and impersonal set of duty holders with an in rem right, the content of that right cannot presume as much background knowledge of context as can an in personam right.

The question of how to design rights is a complex institutional problem subject to the constraint of the informational trade-off.⁸⁴ Standardization through the *numerus clausus* is not the only way to reduce information costs. Title records also have a role to play for some resources, especially land. These records aim to solve the problem of verification costs: making it feasible for a seller to convince a purchaser that she has the rights to sell. Under the principle of *nemo dat quod non habet* ("one cannot give what one does not have"), one who purchases from someone who does not possess title simply loses.⁸⁵ Good faith purchaser exceptions allow, under defined circumstances such as purchasing in open markets, someone purchasing for value without notice to acquire title even in the face of the original owner's claim.⁸⁶ We can only protect one or the other. Nevertheless, title records help push out the possibility frontier.⁸⁷ Through recording or registering, the title can be made more easily alienable (getting the benefits of the good faith purchase rule) without undermining the owner's rights as much as would be the case under a wide good faith purchase rule with no records.

As we saw above, title records make in rem rights easier to communicate, especially to purchasers. Whether they remove all need for standardization is an empirical question. Suggestive in this regard are the relatively robust and definitive registration systems in jurisdictions such as Germany and Taiwan, which are (or were) coupled with a strong version of the *numerus clausus*. Registrars in such jurisdictions are asked to provide definitive title, and a strict *numerus clausus* obviates a deep inquiry into idiosyncratic details in order to proclaim valid in rem rights.

82. See, e.g., *Geomet Exploration, Ltd. v. Lucky Mc Uranium Corp.*, 601 P.2d 1339 (Ariz. 1979).

83. *Cont'l Oil Co. v. Natrona Serv., Inc.*, 588 F.2d 792, 798 (10th Cir. 1978) (discussing *MacGuire v. Sturgis*, 347 F. Supp. 580 (D. Wyo. 1971)); see also *MacGuire*, 347 F. Supp. at 581-85; Finberg, *supra* note 80, at 1036-37.

84. See Smith, *supra* note 2, at 149-57.

85. See MERRILL & SMITH, *supra* note 47, at 885 (internal quotation marks omitted); see also *id.* at 891-92.

86. See, e.g., BÜRGERLICHES GESETZBUCH [BGB] [CIVIL CODE], Jan. 2, 2002, BUNDESGESETZBLATT [BGBl] 42, as amended, §§ 932-35 (Ger.); MINPŌ [MINPŌ] [CIV. C.] art. 192-94 (Japan); Civil Code of Republic of China (Taiwan) art. 948-51. See generally Saul Levmore, *Variety and Uniformity in the Treatment of the Good-Faith Purchaser*, 16 J. LEGAL STUD. 43 (1987).

87. See ARRUDA, *supra* note 36, at 132-67.

From this basic picture we can derive a number of propositions. The first proposition is that customs should be easier to adopt into the law the more they fall toward the in personam end of the spectrum. Thus, contract law can employ merchant custom (although this is much exaggerated).⁸⁸ The quasi in rem customs are easier to apply than in rem ones: because when the set of duty holders is less than in rem, it is easier to assume that they will have notice and the ability to process the duties they bear. Custom sometimes informs the standard in the law of nuisance, and again we are talking about applicability in a given area.

This first proposition—that custom is easier to adopt into the law the more it falls toward the in personam rather than the in rem side of the spectrum—is a special case for custom of the more general phenomenon that in rem rights will tend to be more formal than in personam rights. Property law will be more standardized in its in rem aspects than in those that are more toward the in personam end of the spectrum.⁸⁹ Often, intermediate situations have one feature of in rem but not the other: if in rem rights prototypically avail against numerous and indefinite duty bearers, intermediate situations are those in which the duty bearers are many but identified or indefinite but few.⁹⁰ Here we expect and so far seem to find an intermediate degree of standardization.

Much of the custom that has served as the raw material for property falls in this intermediate zone.⁹¹ Thus, quasi in rem rights availing in a large community might be applied more widely as fully in rem rights. The questions to ask are whether outsiders are likely to have the requisite knowledge, and, if not, whether the custom can be stripped down to make it easier for all those likely to encounter it to process it. Courts of equity could enforce customs about the use of common pool resources. Famously, the law of hot news misappropriation can be interpreted as an adoption of custom, albeit only implicitly.⁹² And, in both of these cases, the set of duty bearers is not fully in

88. See, e.g., Lisa Bernstein, *The Questionable Empirical Basis of Article 2's Incorporation Strategy: A Preliminary Study*, 66 U. CHI. L. REV. 710 (1999); Felix Dasser, *Mouse or Monster? Some Facts and Figures on the Lex Mercatoria*, in 2 GLOBALISIERUNG UND ENSTAATLICHUNG DES RECHTS: NICHTSTAATLICHES PRIVATRECHT: GELTUNG UND GENESE 129, 132–39 (Reinhard Zimmermann ed., 2008); Emily Kadens, *Pre-Modern Credit Networks and the Limits of Reputation*, IOWA L. REV. 2429, (2015); Emily Kadens, *The Myth of the Customary Law Merchant*, 90 TEX. L. REV. 1153, 1193–94 (2012).

89. See Merrill & Smith, *supra* note 45, at 792–99.

90. See *id.*; see also Yun-chien Chang & Henry E. Smith, *An Economic Analysis of Civil Versus Common Law Property*, 88 NOTRE DAME L. REV. 1, 44–47 (2012).

91. See Henry E. Smith, *Custom in American Property Law: A Vanishing Act*, 48 TEX. INT'L L.J. 507, 507–08 (2013) (“[F]or law to incorporate custom, it usually must be adapted from application in smaller communities by stripping out some of the details and becoming more formalized.”).

92. See Richard A. Epstein, *International News Service v. Associated Press: Custom and Law as Sources of Property Rights in News*, 78 VA. L. REV. 85, 97–98 (1992); see also Shyamkrishna Balganesh, “Hot News”: *The Enduring Myth of Property in News*, 111 COLUM. L. REV. 419, 452–54

rem—in the latter case it is referred by the Supreme Court explicitly as quasi-property.⁹³ For whaling, customs such as “iron holds the whale” and “first iron” were largely recognized by the law.⁹⁴ And here too courts worried about applying customs to non-experts.⁹⁵ In *Swift v. Gifford*, Judge Lowell mentioned Justice Story’s reluctance to enforce custom as making the law too complicated and specific,⁹⁶ but noted that the customs in question would in practice only bind whalers, not random members of the public (which would be to their confusion).⁹⁷

The second proposition holds that the more a custom must reach a wide and impersonal audience of duty bearers and enforcers, the more the custom cannot (except at additional effort) require more information than such an audience already has. Whether the custom requires stripping down and formalization will depend on how idiosyncratic the custom is to begin with. In the case of the mining camps, changes like using the boundary of a claim rather than a “spot” were enough to lend the custom the needed degree of formality.

Closely related is the degree of knowledge that the public can be presumed to have. In a small homogeneous polity, one might expect that custom would not need as much formalization to reach an in rem audience of duty bearers. Because such a society requires less formalization in order to apply the custom widely, and removing idiosyncrasy may be impossible without undermining the value of the custom, formalization should play a smaller role in such systems. Thus, a legal system like that of Norway can adopt

(2011); Henry E. Smith, *Equitable Intellectual Property: What’s Wrong with Misappropriation?*, in *INTELLECTUAL PROPERTY AND THE COMMON LAW* 42, 42–43 (Shyamkrishna Balganesh ed., 2013).

93. See Shyamkrishna Balganesh, *Quasi-Property: Like, but Not Quite Property*, 160 U. PA. L. REV. 1889, 1901–03 (2012).

94. See ROBERT C. ELLICKSON, *ORDER WITHOUT LAW: HOW NEIGHBORS SETTLE DISPUTES* 195–206 (1991).

95. Smith, *supra* note 14, at 27–30.

96. *Swift v. Gifford*, 23 F. Cas. 558, 559 (D. Mass. 1872) (“I own myself no friend to the almost indiscriminate habit of late years of setting up particular usages or customs in almost all kinds of business and trade, to control, vary, or annul the general liabilities of parties under the common law, as well as the commercial law. It has long appeared to me that there is no small danger in admitting such loose and inconclusive usages and customs, often unknown to particular parties, and liable to great misunderstandings and misinterpretations and abuses, to outweigh the well-known and well-settled principles of law.” (quoting *The Reeside*, 20 F. Cas. 458, 459 (C.C.D. Mass. 1837))).

97. As Judge Lowell put it:

The rule of law invoked in this case is one of very limited application. The whale fishery is the only branch of industry of any importance in which it is likely to be much used; and if a usage is found to prevail generally in that business, it will not be open to the objection that it is likely to disturb the general understanding of mankind by the interposition of an arbitrary exception. Then the application of the rule of law itself is very difficult, and the necessity for greater precision is apparent.

Id. at 559–60.

a *numerus apertus* in the sense of a relatively free judicial enforcement of custom without running afoul of the informational trade-off.⁹⁸

The third proposition is that customs that do not require much additional knowledge on the part of duty holders are good candidates for in rem treatment. The custom may draw on existing common knowledge or it may be close to an existing legal norm that already is in rem. We saw the latter in the case of civil law *emphyteusis* in France.⁹⁹

The fourth proposition relates to the benefits of custom, or the frustration costs of not giving it in rem effect. The more important the problem the custom solves, the more likely it is worth incurring the information cost of in rem enforcement. In a sense this is an application of the Demsetz Thesis: as a potential externality becomes more important, the tendency will be for property to catch up with it.¹⁰⁰ Of course, we must ask how that will happen and at what cost—including but not limited to information cost.

As we will see in the next Part, the small property customary property right in Taiwan is an excellent candidate for adoption as in rem law. It has a possessory aspect, and it is not that different from regular property—except in its unregistrability. It even is registered for tax purposes, giving notice of a formalized sort. The rights basically mimic regular property rights except for their technical unenforceability. And the small property right meets a clear demand. It thus illustrates particularly the third and fourth propositions.

D. CUSTOM AND SPONTANEOUS ORDER

The information theory provides a more refined take on custom as a source of spontaneous order in the law. Because its origins are outside the state and can be seen as a bottom-up process—at least in comparison to legislation—classical liberals and libertarians have often been quite enthusiastic about custom as a source of law.¹⁰¹ The flip side of this support is the suspicion with which legal centralists, in America from the 1930s and extending back to the French Revolutionaries, regarded custom as a

98. For the preconditions for the large role for customary law in Denmark and Norway, see generally Peter Ørebeck, *Western Scandinavia: Exit Bürgerliches Gesetzbuch—the Resurrection of Customary Laws*, 48 TEX. INT'L L.J. 405 (2013).

99. See *supra* note 56 and accompanying text.

100. Harold Demsetz, *Toward a Theory of Property Rights*, 57 AM. ECON. REV. 347, 350 (1967).

101. See 1 WILLIAM BLACKSTONE, COMMENTARIES *63–92; F.A. HAYEK, NEW STUDIES IN PHILOSOPHY, POLITICS, ECONOMICS AND THE HISTORY OF IDEAS 134–37, 155–59 (1978) (discussing the advantages of “a self-generating order” and stating that “[a]n unlimited legislature . . . cannot avoid acting in [] an unprincipled manner”); 1 F.A. HAYEK, LAW, LEGISLATION AND LIBERTY: RULES AND ORDER 46–48 (1973) [hereinafter HAYEK, LAW, LEGISLATION AND LIBERTY] (discussing spontaneous order as a result of customs from small subparts of society, which, when combined with government, result in a “spontaneous overall order”—society); FREDERICK CHARLES VON SAVIGNY, OF THE VOCATION OF OUR AGE FOR LEGISLATION AND JURISPRUDENCE 20 (Abraham Hayward trans., 1999) (1814); Epstein, *supra* note 92, at 101–02.

competitor to centrally directed efforts at legal change and social engineering.¹⁰²

There is much to the idea that custom can serve as a bottom-up source for law, but the notion is easily exaggerated. In particular, as we have seen in the three previous sections, not all custom can be enforced as law at reasonably low-cost, especially if it involves in rem duties. The traditional view of the common law was “general custom,” and Hayek believed that custom-based common law could be general and abstract as the rule of law required, and yet more of a spontaneous order than other kinds of law.¹⁰³ Thus, while Hayek may have overplayed the role of judges, he can be seen as implicitly recognizing the need for formalization and standardization of custom by judges, if not by legislatures.¹⁰⁴ Nevertheless, in their roles of formalizing custom as an adaptation for the law, courts and legislatures add a touch of the “made order” to the spontaneity of custom. As Bruno Leoni recognized, custom can still be an important source of—or even predicate for—law even if lawyers and judges are needed to generalize and crystallize custom into law.¹⁰⁵ To this we can add that in property especially, legislatures have certain advantages in creating in rem norms, in terms of criteria important to the rule of law, like clarity, universality, comprehensiveness, stability, prospectivity, and implicit compensation.¹⁰⁶ Whether those are net advantages and when courts are actually better than the legislature is a complex and ultimately empirical question. Which type of institution can supply the needed formalization is part of the supply side in the theory generating the propositions about custom and the *numerus clausus*.

IV. THE EMERGENCE OF NEW CUSTOMARY PROPERTY FORMS IN EAST ASIA

We now turn to a case study from the law of property in Taiwan. How much to recognize customary practice that goes beyond the code is an issue in a number of East Asian countries. In Taiwan, all levels of courts have allowed for the line-of-credit mortgage and commercial pledges of personal property¹⁰⁷—both of which serve a useful function (our fourth proposition) and draw on widespread existing knowledge, thereby lowering cost (our third

102. See Smith, *supra* note 91, at 520–21.

103. See HAYEK, LAW, LEGISLATION AND LIBERTY, *supra* note 101, at 72–74 (stating that society has failed to use legislation properly and that “only the observance of common rules makes the peaceful existence of individuals in society possible”).

104. See Smith, *supra* note 14, at 9–10. See generally John Hasnas, *Hayek, the Common Law, and Fluid Drive*, 1 N.Y.U. J.L. & LIBERTY 79 (2005).

105. See BRUNO LEONI, FREEDOM AND THE LAW 216–18 (3d ed. 1991).

106. See Merrill & Smith, *supra* note 2, at 58–60. See generally LON L. FULLER, THE MORALITY OF LAW 38–91 (rev. ed. 1969); Henry E. Smith, *Property, Equity, and the Rule of Law*, in PRIVATE LAW AND THE RULE OF LAW 224, 224–46 (Lisa M. Austin & Dennis Klimchuk eds., 2014).

107. See Yun-chien Chang (張永健), *Is Freedom of Property Form Principle Efficient?: Interpretations of Article 757 of the Taiwan Civil Code and the Underlying Theory* (物權「自治」主義的美麗新世界?—民法第 757 條之立法論與解釋論), 7 TECH. L. REV. (交大科法評論) 119, 162–63 (2010).

proposition). Our main case study is Taiwanese courts' recognition of the "right of de facto disposal" over illegal buildings, which likewise illustrates our third and fourth propositions: the right of de facto disposal draws on existing knowledge and tax registration and is highly valuable.

A. A GENERAL OVERVIEW

The *numerus clausus* principle is explicitly stipulated in the civil codes of East Asian countries, but some are stricter (at least on the books) than others. Article 185 of the Korea Civil Code (enacted in 1958) and Article 757 of the Taiwan Civil Code (revised in 2009) loosened the *numerus clausus* principle, allowing both formal laws and customary laws to create new property forms—what we call an intermediate institutional arrangement. By contrast, Article 175 of the Japan Civil Code (enacted in 1898) and Article 5 of China's Property Law (enacted in 2007) adopt the strict version of the *numerus clausus* principle, under which only the legislature can create new property forms.¹⁰⁸

The laws in action, however, appear to converge. In South Korea, backed by the civil code, courts have recognized several types of property forms created by customs,¹⁰⁹ including a customary *superficies* (the right of the owner of a building or other object to use the underlying land belonging to another), a specific *superficies for gravesite*, and trust-like *Treuhand* ownership¹¹⁰

108. For an introduction of the *numerus clausus* principle in China, see, for example, Yuanshi Bu, *Security Rights in Property in Chinese Law: The Unattainable Goal of Constructing a Coherent Legal Regime?*, 5 EUR. REV. PRIVATE L. 1005, 1007–08 (2010); Mo Zhang, *From Public to Private: The Newly Enacted Chinese Property Law and the Protection of Property Rights in China*, 5 BERKELEY BUS. L.J. 317, 346–48 (2008).

109. One can debate whether the customary property rights in Korea and elsewhere crack loose the "fixed content" part or "limited number" part of the *numerus clausus* principle. As explained above, *supra* note 15, in terms of the optimal standardization theory, it does not matter that much, though for informational cost reasons, courts are expected to be more willing to tinker with contents of existing forms than to create brand new forms.

Another potential challenge would see the customary property rights in the text as simply a re-packaging of existing legal property forms. A statutory easement is an easement prescribed by statute. Landowners can also enter into voluntary easement agreements. The contents of the two easements are the same, and their difference lies in the voluntariness of the property relations. When courts recognize a customary property right that favors one party at the expense of the other, and the content of the right is exactly the same as stipulated in civil codes, it works like a statutory property right, only sanctioned by courts, not the legislature. (In a sense, the easement of necessity is a "customary" property right recognized in the common law.) Such court-sanctioned customary (or statutory) property rights have nothing to do with optimal standardization, as neither the content of property forms manipulated nor the number of forms increased. Limited by space, we will not discuss in detail whether Japanese or Korean customary property rights are merely new wines in old bottles though we are confident that some of them are surely more than re-packaging. For economic analysis of statutory easements versus easements of necessity, see generally Yun-chien Chang, *Access to Landlocked Land: A Case for a Hybrid of Property and Liability Rules* (July 26, 2013) (unpublished manuscript), available at <http://ssrn.com/abstract=1986739>.

110. The concept of *Treuhand* ownership originated in Germany. For an introduction on the concept, see AKKERMANS, *supra* note 1, at 184–86.

(sometimes called security *Treuhand*).¹¹¹ In Japan, courts cannot stop the emergence of spontaneous order, and they accordingly recognize certain agrarian rights, a hot spring use right, and *Treuhand* ownership.¹¹² Some Japanese legal scholars justify the violation of the *numerus clausus* principle by arguing that “statutes” in Article 175 of the Japan Civil Code also could include customary laws.¹¹³ Courts in Taiwan since the 1960s, when the old version of Article 757 of the Taiwan Civil Code only allowed statutes to create new property forms, have recognized at least one prominent, new property form without explicitly admitting that courts were creating one.¹¹⁴ We return to this case in Section B.

China’s 2007 Property Law (“CPL”) was enacted less than ten years ago, so it is still unclear how courts in China would interpret the seemingly strong wording in its Article 5. Nevertheless, most, if not all, leading Chinese property scholars have advocated the view that sources other than statutes can create new property forms, despite the fact that the Chinese legislature explicitly rejected this proposal.¹¹⁵ More specifically, it has been argued that customs,¹¹⁶ courts,¹¹⁷ or administrative agencies can and should be allowed to create new property forms.¹¹⁸ A draft civil code proposed by a team of leading private law scholars suggests that customs be allowed to create new property

111. See JIZI CUI (崔吉子), LATEST CIVIL CODE IN KOREA (韩国最新民法典) 108 (2010); Kim, *supra* note 18, at 383–89 (discussing superficies and gravesite superficies in Korean law).

112. See, e.g., SUZUKI, *supra* note 20, at 436.

113. See, e.g., *id.* at 435–37; 1 TSAY-CHUAN HSIEH (謝在全), TAIWAN PROPERTY LAW (民法物權論) 56–57 (5th ed. 2010).

114. See Chang, *supra* note 107, at 162.

115. The fifth and sixth drafts of the CPL provide that although property forms shall be stipulated by law, rights that have the characteristics of property rights but have not been specified in statutes shall nonetheless be regarded as property rights. In total there were seven drafts of the CPL (not counting the draft that became the CPL). See WEIXING SHEN (申卫星), PRINCIPLES OF PROPERTY LAW (物权法原理) 82 (2008).

116. See *id.* at 85–87; JIANYUAN CUI (崔建远), PROPERTY LAW (物权法) 23 (2d ed. 2011); HUIXING LIANG & HUABIN CHEN (梁慧星、陈华彬), REAL RIGHT LAW (物权法) 71–72 (5th ed. 2010). Customs themselves, before officially recognized by either the courts or administrative agencies, are unlikely to be used widely by dealmakers as property. The legal uncertainty would limit the usage of such property customs—ironically, when most people refrain from using it, a custom can hardly arise! Social norms might jump-start the property customs, though. See generally ELLICKSON, *supra* note 94; Shitong Qiao, *Small Property, Big Market: A Focal Point Explanation*, 63 AM. J. COMP. L. (forthcoming 2015), available at http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2399675.

117. See SHEN, *supra* note 115, at 85. The Legal Committee under the National People’s Congress has reached a consensus that the *numerus clausus* principle does not prohibit the judiciary from creating new property forms through court opinions. See YIN-CHIN CHEN ET AL. (陳櫻琴、席志國、方立維), AN INTRODUCTION TO CHINA’S NEW PROPERTY LAW (中國大陸新物權法簡析) 70 (2008).

118. See CUI, *supra* note 116, at 21; SHEN, *supra* note 115, at 85. *But see* SONGYOU HUANG (黃松有), INTERPRETATION AND APPLICATION OF PRC’S PROPERTY LAW (中華人民共和國物權法條文理解與適用) 61 (Songyou Huang ed., 2007) (arguing that only statutory laws can create new property forms).

forms.¹¹⁹ Finally, it is worth noting that China offers an excellent example of spontaneous order and emergence of new property forms. During the Cultural Revolution (1966–1976), the communes (or production teams) were the unit for agricultural production.¹²⁰ In 1978, 18 farmers in Anhui Province contracted to divide the collectively owned land, and each farmer would work only on his own part according to the *chengbao* contract.¹²¹ Over the years, the *chengbao* contract gained traction throughout China. Eventually, in the 2002 Farmland *Chengbao* Act [農村土地承包法] and the 2007 Property Law [物權法] art. 124–134, *chengbao* was officially recognized as a type of *usufruct* (a property form).

B. A CASE STUDY ON PROPERTY CUSTOM IN TAIWAN

Since 2009, when the Taiwan Civil Code was amended, courts in Taiwan have not explicitly recognized any new customary property form.¹²² Nonetheless, in the latter half of the twentieth century, courts in Taiwan have recognized several new customary property forms, without discussing the *numerus clausus* principle. In the first subsection, we discuss two customary security interests. The second sub-section delineates an ownership-like use interest—the right of de facto disposal.

1. The Line-of-Credit Mortgage and Commercial Pledge

A prominent example of customary property rights is the line-of-credit mortgage. A recognized customary property form in Japan¹²³ and imported to Taiwan in the early twentieth century when Taiwan was under Japanese rule in 1895–1945,¹²⁴ the line-of-credit mortgage was widely used after 1945 in the market as an ordinary mortgage plus a new type of security contract. Then the Ministry of Finance requested all banks to take line-of-credit mortgages. At the same time, local land registrars were also mandated to accept registrations of line-of-credit mortgages. In addition, the Ministry of Justice—in the old days of the authoritarian regime—requested that the district courts and appellate courts stand out of the way. The line-of-credit mortgage thus

119. See HUIXING LIANG (梁慧星), A PROPOSITIONAL VERSION WITH REASONS FOR CIVIL CODE DRAFT OF CHINA: THE BOOK OF THE RIGHT OF THINGS (中国民法典草案建议稿附理由：物权编) 11 (2013).

120. See, e.g., RONALD COASE & NING WANG, HOW CHINA BECAME CAPITALIST 14–15 (2012).

121. See, e.g., *id.* at 47.

122. Indigenous people in Taiwan traditionally have a different conception of property rights, and the new law opens the door to them to keep their traditional property system. Tay-Sheng Wang (王泰升), *A Turning Point in Legal Development of Taiwan (2007–2009)* (法律史：臺灣法律發展的「輪替」、轉機與在地化(2007–2009)), 39 NAT'L TAIWAN U. L.J. (國立臺灣大學法學論叢) 165, 196 (2010).

123. The line-of-credit mortgage was incorporated in the Japan Civil Code in 1971.

124. See Wan-Yu Chen (陳宛妤), *Mortgage Law and the Society in Taiwan Under Japanese Colonial Rule (2): Focus on Analysis of the Taiwan Colonial Court Records (植民地台灣における担保法と社会(二)一日治法院文書の分析を中心に)*, 172 KYOTO L. REV. (京大法学論叢) 67 (2012).

became a recognized property form.¹²⁵ This example illustrates our third and fourth propositions of the property customs, laid out above. The line-of-credit mortgage had been and still is a heavily used form of security interest, and it is very easy for duty holders and third parties in general to understand. The line-of-credit mortgage is just a slight conceptual, legal-style adjustment of an existing form (the ordinary mortgage), and it has to be registered. This example also shows that when the *numerus clausus* principle under-supplies property forms, the market could come up with deal structures that mimic property forms and there is pressure for the government (or the court) to recognize them.

Another example is the commercial pledge of personal property (pawn), which got the nod of the Taiwan Supreme Court probably because the civil code recognizes the noncommercial pledge as a property form in the civil code; an administrative rule (not a statute) lays out the contours of the right; pawning is very common; and pawn shops are heavily regulated. These two incidents show the importance of administrative agency and court approval, particularly the nudge from the former. This again fits nicely with the third and fourth propositions.

2. The “Right of De Facto Disposal”

This Subpart will elaborate another example, the “right of de facto disposal”¹²⁶ of illegal buildings, in which the courts did all the heavy-lifting alone. We use this example to again illustrate our propositions that courts are likely to recognize customs that impose low information costs on third parties and create high value, even though doing so violates the *numerus clausus* principle.

Pursuant to the Taiwan Civil Code art. 759, a transfer of property rights is legally effective upon registration.¹²⁷ The precondition for registering such transfers, in the case of buildings or fixtures, is that they have undergone “the initial registration of ownership.”¹²⁸ Since the 1960s, however, only developers (or owners) of buildings or fixtures with proper building permits in compliance with all the building code regulations are allowed to file for the initial registration.¹²⁹ That is, while the underlying land parcels could have been registered,¹³⁰ the buildings upon them may never be registered. From

125. See Chang, *supra* note 107, at 162–63.

126. The right of de facto disposal is a close substitute, or stand-in, for ownership, and thus may not be the new property forms that proponents of the *numerus clausus* principle and *numerus apertus* principle have in mind.

127. Taiwan uses the Torrens registration system. See generally TAIWAN REGULATIONS OF THE LAND REGISTRATION (土地登記規則).

128. See *id.* art. 79.

129. See *id.*

130. Nowadays essentially all land parcels are registered in Taiwan. See Chang, *supra* note 11 (manuscript at 22–23).

the *ex ante* perspective,¹³¹ one may expect that the law thus discouraged developers from building illegally.¹³² While it might have prevented some rational and risk-averse people from the illegal business, many were not deterred. And a market for illegal buildings has been in place for half a century. Indeed, illegal buildings are so prevalent that even the Constitutional Court of Taiwan has its office in one!¹³³

The Taiwanese executive branch is not very active in solving the illegal building problem. This is perhaps because it is too big a problem and a strong-arm policy may win elected officials a small gain in popularity at the expense of the votes of holders of *de facto* disposal rights. The administrative agencies pursue a four-fold strategy: (1) the registrar denies registration; (2) the enforcement department tears down a small percentage of illegal buildings that its budget and manpower allows them to do;¹³⁴ (3) the tax authority levies property tax on illegal buildings, but the tax rates for legal and illegal buildings are the same; and (4) at most one-time, small-amount civil fines are imposed.¹³⁵

Lawsuits flooded the courts.¹³⁶ Judges were forced to deal with the hot potato. From the get-go, the Taiwan Supreme Court did not take the position that illegal buildings are inalienable (which would be strongly *ex ante* and consistent with the civil code). Thus, the Taiwan Supreme Court has to offer an explanation as to what kind of right changes hands and through what notice mechanism. Doctrinally, the illegal and unregistered building is hard to classify. Buildings are immovables, so the delivery-and-transfer rule for

131. See Lucian Arye Bebchuk, *Property Rights and Liability Rules: The Ex Ante View of the Cathedral*, 100 MICH. L. REV. 601, 603 (2001); Henry E. Smith, *Mind the Gap: The Indirect Relation Between Ends and Means in American Property Law*, 94 CORNELL L. REV. 959, 980 (2009); see also Herbert Hovenkamp, *Fractured Markets and Legal Institutions*, 100 IOWA L. REV. 617, 648 (2014) (“The most efficient solution to the . . . problem is to allocate property rights in such a way that the problem never arises in the first place.”).

132. The Chinese government is also facing the thorny problem of “small properties.” Small properties are illegal and thus cannot be registered, and yet they are bought and sold in very large volumes. See Shitong Qiao, *Small Property, Adverse Possession, Optional Law, and ‘Small Property’*, in LAW AND ECONOMICS OF POSSESSION, *supra* note 73, at 290 (describing the dilemma that local governments in China face: “to demolish [the small properties] has proved to be mission impossible; to legalize them would encourage more illegal buildings”); see also Shitong Qiao & Frank Upham, *Relational Property and the Evolution of Property Rights: A Case of Chinese Rural Land Reform*, 100 IOWA L. REV. 2479, 2495 (2015) (“[W]hen property law lags behind property relations, the latter prevails.”).

133. *Judicial Yuan Building a Landmark 4th Floor Expansion to be Demolished*, TVBS (April 18, 2007, 12:42 PM), <http://news.tvbs.com.tw/entry/327640>.

134. Government statistics in 2005–2013 show that the existing “illegal constructions” (including illegal buildings and illegal extensions such as a balcony or garage) at the end of each year tends to increase over time (on average around 500,000 in total throughout Taiwan). *Id.*

135. See CHANG, *supra* note 22.

136. For instance, from January 2006 through December 2011 alone, when the court precedents should have been clear and stable enough, 3169 judicial opinions contain the term “right of *de facto* disposal.” CHANG, *supra* note 22.

movable properties does not apply. It is real property, but the registration policy shuts the door to legal transactions. Thus, finding a route to legal enforceability is no easy task. To make a long story short, the Taiwan Supreme Court in 1952 ruled that the developers gain ownership through original acquisition (i.e., by building the fixture),¹³⁷ and that developers as owners of illegal buildings cannot transfer ownership or any lesser property interest to others.¹³⁸ Nonetheless, they can sell the “right of de facto disposal,” which is roughly coterminous with the “right to destroy.”¹³⁹ The right was named as such because it was originally conceptualized to deal with the question whether a buyer of illegal buildings may tear it down and was not obliged to pay the “owner” damages.¹⁴⁰ Over the years since the 1960s, the Taiwan Supreme Court through a series of decisions and precedents¹⁴¹ gradually clarified and enriched the content of the right of de facto disposal—but note that the Taiwan Supreme Court never explicitly required any notice mechanism, not even a change of possession. Now the right includes various use rights but the original name sticks. Basically, buyers of illegal buildings (or holders of rights of de facto disposal) can use and enjoy the building very much in the same way owners do,¹⁴² but banks have been reluctant to accept illegal buildings as security.

The right of de facto disposal has fuzzy edges, however. Because of the stringent *numerus clausus* principle in the Taiwan Civil Code when the Supreme Court shaped this new right, the Supreme Court never spelled out whether the right of de facto disposal is a contractual right or a property right. This ambiguity confuses everyone involved, including courts themselves.¹⁴³ Consider this example: A constructs an illegal house and then sells it to B, and B then sells it to C. When C possesses the house, A goes bankrupt. A’s creditor forecloses on the house in question and petitions the court to auction the house to pay off A’s debt.¹⁴⁴ According to Taiwan law, only parties with a property interest can object and stop the auction proceedings. C’s right of de

137. The case number is Supreme Court Year 41 No. 1039 Precedent (最高法院 41 年台上字第 1039 號判例).

138. The clearest exposition of the highest court’s take on this issue is Supreme Court Year 67 Second Civil Resolution (最高法院 67 年第 2 次民事庭會議決議).

139. See generally Lior Jacob Strahilevitz, *The Right to Destroy*, 114 YALE L.J. 781 (2005).

140. See CHANG, *supra* note 22.

141. See, e.g., Supreme Court Year 52 No. 681 Precedent (最高法院 52 年台上字第 681 號判例); Supreme Court Year 48 No. 1812 Precedent (最高法院 48 年度台上字第 1812 號判例); Supreme Court Year 50 No. 1236 Precedent (最高法院 50 年度台上字第 1236 號判例); Supreme Court Year 69 No. 3726 Decision (最高法院 69 年度台上字第 3726 號判決).

142. Thus, one may contend that the right of de facto disposal is functionally ownership. Nonetheless, doctrinally speaking, the right of de facto disposal would have to count as a new form.

143. Sometimes courts treat the right of de facto disposal as a contractual right, sometimes a property right. See CHANG, *supra* note 22.

144. If B goes bankrupt and B’s creditor files for foreclosure and auction, courts would rule in the same way.

facto disposal is not considered a property right for this purpose under the Taiwan Supreme Court's jurisprudence. Thus, C is unable to stop A's or B's creditors from foreclosing her house. A lot of people in the situation of C have brought lawsuits, hoping to sway the court to alter this unreasonable ruling, but so far to no avail.

It is understandable that before the 2009 amendment of the Taiwan Civil Code, which recognizes customs as sources of property forms, the Taiwan Supreme Court was reluctant to disregard the civil code and to declare that the right of de facto disposal is a full-fledged property right. Nonetheless, by creating this right and giving it at least partial in rem effect, the Taiwan Supreme Court greatly reduces the frustration costs of buyers of illegal houses and apartments. Recognizing the right of de facto disposal also reduces the amount of litigation, as it clarifies the rights and obligations of the transacting parties. From an *ex post* viewpoint (that is, given the large number of illegal buildings and their transactions), the benefits of recognizing the de facto right of disposal (implicitly as a property custom) are high.¹⁴⁵

The Taiwan Supreme Court is willing to recognize (albeit implicitly) this type of customary transaction as a transfer of (quasi-)property rights,¹⁴⁶ because the information costs imposed on third parties is low, as the third proposition about custom predicts. First, illegal buildings are not registered in the real estate registry, so the record book does not contain any information that might confuse third parties regarding titles. Second, unlike land, illegal houses and apartments are independent and easily identifiable as a separate thing. Exclusive and stable possession strongly signals that the possessor owns a property interest. Third, if the potential buyer still doubts whether the possessor is a tenant or the holder of the de facto disposal right, she could request the seller to provide a certificate issued by the tax authority that shows that the seller is the current property taxpayer. The tax authority in Taiwan maintains a "building tax registry" that includes the illegal buildings.¹⁴⁷ While an entry in the tax registry is not considered proper registration for de jure transfer of property rights under the civil code, it is sufficient to prove that the seller is not a mere renter, but a holder of a de facto disposal right.

145. From an *ex ante* viewpoint, validating the property rights of illegal buildings creates (socially bad) incentives for future illegal builders (assuming efficiency dictates the prohibition of illegal buildings). Nevertheless, as long as the amount of litigation is reduced, courts might still consider the recognition of a right as beneficial (at least to the judicial branch and the transacting parties).

146. For definition of quasi-property, see Chang & Smith, *supra* note 90, at 44-47, and see generally Balganes, *supra* note 93 (discussing quasi-property).

147. See CHANG, *supra* note 22.

V. CONCLUSION

The takeaway lesson of the Taiwan case study is that property custom is more likely to be recognized as giving rise to property rights when the customary property right imposes a low information cost on third parties and the value it creates is high. How custom is allowed into the law is consistent with a theory of the costs and benefits of information; both the *numerus clausus* principle and its limited exception through adapting custom in the law reflect the communicative trade-off between reaching an extensive audience and packing information intensively into communicative effort. Given the limited number and relative inflexibility of property forms in civil law, a statutory monopoly on property creation would be sub-optimal because new property forms with net (marginal) social value may well not be created. The intermediate institutional arrangement, under which statutes and court-sanctioned customs can both create new property forms, might strike the right balance between frustration costs and measurement costs and between spontaneous order and designed order in civil law.