The Law of Impersonal Transactions: Meaning and Difficulties

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Abstract

Most economic interactions happen in a context of sequential exchange in which innocent third parties suffer information asymmetry with respect to previous "originative" contracts. The law reduces transaction costs by protecting these third parties but preserves some element of consent by property right holders to avoid damaging property enforcement—e.g., it is they as principals who authorize agents in originative contracts. Judicial verifiability of these originative contracts is obtained either as an automatic byproduct of transactions or, when these would have remained private, by requiring them to be made public. Protecting third parties produces a sort of legal commodity which is easy to trade impersonally, improving the allocation and specialization of resources. Historical delay in generalizing this legal commoditization paradigm is attributed to path dependency—the law first developed for personal trade—and an unbalance in vested interests, as luddite legal professionals face weak public bureaucracies.

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1. Introduction

This work develops a theory of the institutions supporting impersonal transactions by publicly formalizing private contracts. It sees public contract formalization as a public intervention on private contracts that allows judges to apply market-friendly rules when adjudicating disputes over subsequent contracts ex post. This solution protects innocent third parties and thus obviates the information asymmetry that they suffer when entering into such subsequent contracts. In so doing, it facilitates impersonal market transactions.

The starting point for our analysis are sequential exchanges in which, first, one or several "principals"—owners, employers, shareholders, creditors, etc.—voluntarily contract with one or several "agents"—possessors, employees, company directors and managers—in an "originative" transaction; and, second, the agent then contracts "subsequent" transactions with third parties. Sequential exchanges are needed to obtain the benefits of specialization in the tasks of principals and agents. However, they give rise to substantial transaction costs, because third parties suffer information asymmetry with respect to the previous originative contract. In particular, third parties are often unaware if they are dealing with a principal or an agent, or if the agent has sufficient title or legal power to commit the principal. This constitutes a grave impediment, especially for impersonal transactions.

Moreover, principals also face a serious commitment problem when trying to contain this asymmetry because their incentives change after the third party has entered the subsequent contract. Before contracting, principals have an interest in third parties being convinced that agents have proper authority but their incentives change drastically if the business turns out badly. Understandably, the typical dispute triggered by sequential transactions is one in which the principal tries to elude obligations committed by the agent in the principal's name, whether the agent had legal authority or not.

The law can adjudicate in such disputes in favor of the principal or the third party. Favoring the third party will be referred to here as enforcing "contract rules", as opposed to the seemingly more natural "property rules" which favor the principal. Their effects are clear. Take the simple case in which an agent exceeds his legal powers when selling a good to an innocent third party. Applying the "property rule" that no one can transfer what he does not have, the sold good returns to the principal (the "original owner") and the third party (supposed here to be a "good faith purchaser for value") wins a mere claim against the agent. This will maximize property enforcement—the owner held a right *in rem* so his right is not damaged without his consent2—but will worsen the information asymmetry suffered by all potential third parties with respect to

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¹ By "innocent" third parties I refer to good-faith parties who are uninformed about the matter in question.

² The concepts of property rights as rights *in rem* and contract rights as rights *in personam* are examined in depth by, e.g., Merrill and Smith (2001b, pp. 780-89). Note that the economic literature often uses a broader concept of "property rights" that includes both property and contract rights.

legal title. Conversely, the law can apply an indemnity or "contract rule" so that the sold good stays with the third party and the principal only wins a claim against the agent. This will then minimize information asymmetry for potential third parties but will also weaken property enforcement.³

In principle, the choice of rule involves a tricky trade-off between property enforcement and transaction costs. On the one hand, enforcing contract rules obviates the information asymmetry usually suffered by third parties and encourages them to trade. It thus transforms the object of complex transactions into legal commodities that can be traded easily, thus extending the type of impersonal transaction that characterizes modern markets. On the other hand, enforcing contract rules dilutes the principals' property rights, endangering investment and specialization in the tasks of principals and agents.

To overcome this tradeoff between property enforcement and transaction costs, expanding the set of viable contractual opportunities without damaging property rights, the law tends to apply contract rules, but allowing principals to opt for property rules when they make their choice public. Principals can produce this publicity by various means, such as keeping possession of movable assets or filing their claims to inmovables in a public registry. This way, when principals opt for a property rule, their rights become safer while, thanks to publicity, third parties will suffer little information asymmetry. Similarly, when principals choose a contract rule, third parties' rights are safe while principals' rights are weaker. This weakening of property is limited, however, by the fact that principals choose the agent whom, for instance, they entrust with possession or appoint as a their representative, this being the moment when they implicitly "choose" a contract rule.

Different transactions pose varying degrees of difficulty for the smooth operation of this switching of rules. There are fewer difficulties when the originative contract inevitably produces verifiable facts, such as the physical possession of movable goods or the ordinary activity of an employee. For such cases, judges can base their decisions on public information.

This "informal" solution is harder to apply, however, when the originative contract produces less verifiable facts. It may even be impossible if the contract remains hidden and its

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³ The use of the terms "property rule" and "contract rule" echoes the difference between property and contract rights that the original owner retains. It also highlights the role of registries in facilitating the voluntary "dilution" of property rights, treating them as contract rights. These rules are also similar but distinct from the "property" and "liability" rules defined in a classic work by Calabresi and Melamed (1972) because the rules here are defined in the context of a three-party sequence of two transactions instead of consisting of a taking affecting only two parties. Moreover, our analysis focuses on the role played by the parties in each transaction, disregarding the fact that current third parties will act as principals in a future sequence of transactions. Consequently, when good-faith third parties win a dispute over their acquisitive transaction (i.e., when they are given a property right), they do not win as a consequence of applying a property rule, which—by definition—would have given the good to the original owner. In such a case, the third party does not pay any monetary damages to the original owner, as in Calabresi and Melamed's liability rule. Moreover, Calabresi and Melamed's property rule is weaker, referring only to the ability to force a would-be-taker to bargain for a consensual transfer similar to specific performance, and thus arguably has little to do with a right *in rem*.

consequences are not observable. Consider, for example, the difficulties for clearly establishing by purely private contract the existence of a corporation, distinguishing the corporation's assets from the personal assets of its shareholders.

In such contexts of harder verifiability, it helps to publicly "formalize" the originative contracts, by entering and preserving at least some information on them in a public registry. To prevent manipulation, this registration or "public formalization" process necessarily has to be independent of all the parties, including parties to the originative contract. This latter point makes it wholly different from "private formalization" (i.e., having the contract written down, prepared by lawyers or authenticated by the presence of witnesses), designed to safeguard the relation between parties to such originative contracts. Moreover, key features of the originative contract need to be made available to the public or at least to potential third parties, so that they can know which rules are applicable to any subsequent contracts. In essence, registration becomes the means to make the voluntary choice of market-enabling rules verifiable by courts and therefore commit parties to their choices.

The analysis in this paper is close to several theories of property—meaning, *in rem*—rights, such as, mainly, Merrill and Smith (2000), Hansmann and Kraakman (2000, 2002), and Arruñada (2003). It departs from part of the previous literature (e.g., Medina, 2003; Armour and Whincop, 2007) by focusing on the cases and solutions that are prevalent in the population of transactions instead of those most represented in the litigated sample. Its main goal is to explain the role of institutions in modifying the problem's information structure, with the intention of reaching global optimality. It pays relatively little attention to how parties' incentives and costs drive the local optimality of alternative rules, which is the main line in most analyses of exceptions in this area.

The rest of this work proceeds as follows. Section 2 introduces the main concepts used in the analysis: impersonal exchange, single and sequential exchange, originative and subsequent transactions. Section 3 clarifies the differences between single and sequential exchange and the importance of sequential exchange for specialization. It also examines a representative sample of sequential exchanges in business and real property, showing how they are present in most economic activity, what they have in common and how they differ from each other. Section 4 identifies the nature of the title problem present at the core of all these exchanges and the solutions that are applied to solve it. In essence, the problem is one of building institutions able to ensure strong property rights for owners without increasing transaction costs for innocent acquirers, thus making impersonal exchange possible. Generally speaking, solutions apply contract rules that protect acquirers but preserve a substantial role for the consent of owners in choosing the rule or the agent. Lastly, section 5 explores the difficulties involved in developing these institutional solutions, which are attributed to historical path dependency—the law first developed to support personal exchanges—; sunk costs by jurists, who often keep thinking in terms of personal transactions; and the vested interests of law professionals, who in this area are often able to prevail over relatively weak public bureaucracies.

2. Analytical framework

2.1. The nature of impersonal exchange

Modern economies prosper on the basis of specialization and trade. More specialized resources and firms are more productive, but this greater specialization only makes sense when producers can sell their production in a larger market. Specialization and, therefore, economic growth becomes more feasible when trade goes beyond the personal circle of known people. By expanding the market, impersonal exchange opens all sorts of new specialization opportunities which are essential to economic growth.⁴

Given the multiplicity of concepts in the literature, it is important to clarify that this work takes impersonal exchange to be the type of exchange in which the wealth, solvency, reputation or other characteristics of the parties are irrelevant with respect to their contractual performance.

This definition considers many forms of trade to be personal. First, most trade between parties who know each other is clearly personal as it relies on their mutual knowledge. Even much of the trade with strangers requires gathering information to know which performance assurances—for instance, reputation—they offer; so it also becomes personal. Thirdly, trade is often considered to be impersonal when it relies on independent judges.⁵ This reliance may reduce the amount of personal information required for transacting but not fully, as parties still need to ascertain at least how solvent their obliged counterparties are. Even without impartial courts, impersonal trade is also possible under a community responsibility system, when all members of a group (for instance, all merchants of a particular city in late medieval times) are liable for the behavior or contractual obligations of each of its members (Greif, 2002, 2006). Such a system allows strangers to trade with group members on the basis of very limited personal information, just enough for them to unambiguously know which individuals are members of which groups and which groups are dependable. It also requires personal monitoring within each group. Both judicial enforcement and community responsibility therefore make transactions more impersonal but still retain some personal attributes. Similarly, the transactions made possible by reputational intermediaries (mostly, financial institutions) remain personal to the extent that they are based on the reputation of the intermediaries and their knowledge of their clients.6

Conversely, the present work considers an exchange to be truly impersonal when the value of the transaction is independent of any of the parties' characteristics, further simplifying the

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⁴ On the importance of impersonal exchange see mainly North and Thomas (1973), Granovetter (1985), North (1990), Seabright (2004) and, for a more foundational treatment, Hayek (1982).

⁵ For instance, North (1990, pp. 34-35; 1991) and Wallis (2009), who emphasizes equal treatment of citizens by courts.

⁶ For instance, credit transactions arranged in the 17th and 18th centuries by the Paris notaries studied by Hoffmann, Postel-Vinay and Rosenthal (2000) remained personal, as they were based on the notaries' reputation, which allowed them to act as intermediaries, and notaries' knowledge of their clients, who consequently suffered substantial switching costs (p. 122).

parties' information problem. However, this can be achieved only by defining rights in respect of assets instead of persons. More generally, it can be achieved—as will be explained below—by diluting the property rights of former right-holders, producing legal commodities to the benefit of innocent third-party acquirers.

Exchange impersonality can thus be considered as a more or less continuous attribute of transactions, derived from the more or less personal nature of the safeguards used to enforce contractual performance and in turn affecting the amount of personal information that parties need to gather before committing themselves to the exchange. Going from the most to the least personal (and omitting individual moral traits), the starting point are expectations of future trade and market-observable reputation, then intermediate cases of indirect liability (community responsibility systems) and, lastly, impartial judicial enforcement of contractual agreements.

However, this work focuses on the fully impersonal assurances provided by rights directly defined on assets. Two caveats are in order. First, as we will see below, this characterization in terms of assets is superficially inexact for some business transactions in which no real assets are involved so a more general term, such as legal commodities, would be more appropriate. Yet the substance of the case is the same to the extent that the nature of rights hinges on the actions available to the right holder to enforce them.⁷

Second, impartial judicial enforcement is a necessary but insufficient condition for this fully, asset-based impersonal exchange. Given that, to be secured, rights on assets have to be respected by everyone, they require some sort of public or judicial enforcement, which is therefore a necessary condition. However this is not sufficient in itself because, when rights are defined on individuals, parties would need personal information to avoid dealing with insolvent or judgment-proof counterparties.

2.2. The information structure of single and sequential exchanges

For our purposes, it is useful to distinguish two types of conflicts typically solved by judges, which correspond to two different exchange structures—single and sequential exchanges. Single exchange involves two or more parties in only one transaction—for instance, a principal and an agent who will provide services to the principal. Sequential exchange involves in a subsequent transaction at least a third party to the first originative transaction—for example, a previous owner or some other person who now contracts with the agent. As we will see, public formalization of originative contracts is needed to make some of these sequential exchanges feasible.

A famous example of single exchange is the common treatment given to Akerlof's (1970) market for "lemons", in which the owner of a used car is trying to sell it. Prospective buyers are reluctant to buy because, given that owners know the quality of their own car better, there is a tendency for used cars on sale to be of poor quality. This information asymmetry with respect to physical quality poses a serious threat to trade, and parties must dedicate plenty of resources to produce information and provide all sorts of quality assurances.

⁷ See, e.g., Coleman and Kraus (1986, p. 1346), Calabresi (1997, p. 2205), and Rose (1997, p. 2179).

Many of these solutions may be implemented by parties alone by, for instance, verifying quality and investing in reputation. They can also rely on a judge to complete and enforce the contract. In particular, to overcome the information asymmetry about quality, parties will define the promised performance of the car. Also, the seller can guarantee a minimum level of quality, promise to pay future repairs or give back part of the selling price in case of a major breakdown. Specifying and verifying these relevant dimensions of performance would be costly. For instance, parties would have to write them down and keep a copy of the contract for future use. If contract obligations are not fulfilled, the aggrieved party could call the judge to enforce the contract, using it as a source of primary evidence for the judge's decision.

A variant of this "lemons" example illustrates the problem posed by sequential exchange: how does the buyer know that the seller is really the owner or, in general, has legal power to sell the car? If he does not have such power, the buyer faces the loss of the full purchase price. Therefore, this information asymmetry about what I am referring to as legal "title", may be even more serious than that about physical quality, which most often only causes a partial loss. It is also harder to solve by parties alone because in the absence of registries title evidence may remain hidden, however much title examiners strive to clarify title, and developing registries faces a collective action problem whose solution exceeds the power of individual parties.

The problem of the judge is also made more complex. Instead of simply solving a conflict between the parties to the contract, by comparing actual and promised performance, the judge in a sequential exchange case has to adjudicate the car to one of the two allegedly innocent claimants—the previous owner and the buyer—, granting the losing party a mere claim for indemnity against the seller. In most title conflict cases, such a claim is much less valuable than its alternative, and often has little value or is unenforceable.

The effect of this type of judicial decision is substantial. Expectations about similar cases will affect the incentives of all parties potentially involved with this type of asset and transaction to invest, trade and specialize. Potential buyers will be more reluctant to purchase if they think judges will rule for the owner (that is, if judges apply a property rule and assign the asset to the owner); and owners will be less willing to invest if they think judges will rule for the buyer (if, applying a contract rule, judges assign the asset to the buyer). Both will also take more precautions in case judges rule against them: buyers will investigate title more and will prefer to contract with people they know. Consequently, there will be less impersonal exchange. Similarly, owners will be more careful about choosing agents and, when possible, will prefer those they know personally or who, more generally, offer good personal guarantees. The fact that owners will try to avoid putting themselves in a position where they may risk being dispossessed will hinder specialization: owners will contract more directly instead of using intermediaries, given that it is separation of ownership and control that creates such a risk. Furthermore, many of these effects impose invisible costs in terms of lost trade opportunities, especially but by no means only in less developed economies.

All these effects mean that judicial decisions on sequential exchange cases exert a major effect on economic activity. It is therefore crucial to optimize them, so they must be applied selectively, on the basis of reliable contractual evidence. This work explains a key input of this judicial process: the one produced by "contract formalization" institutions whose function is, in essence, to provide reliable evidence for these judicial decisions when such evidence is not readily available as a byproduct of the contracting and productive processes. Using this evidence, judges can decide litigated cases by applying rules that favor innocent uninformed parties, which

should encourage them to trade impersonally, and, in turn, encourage all participants to specialize. Furthermore, such evidence allows judges to apply such rules efficiently, without damaging property rights.

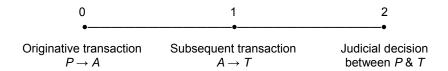
The next step in our analysis clarifies the differences between single and sequential exchange and explains why sequential exchange is essential for economic specialization.

3. The prevalence of sequential exchange

3.1. Sequential exchange required for specialization

The scope of single exchange is severely limited because most specialization necessarily involves sequential exchange—originative and subsequent transactions. This is mainly the case when one of the parties to the contract is the agent of someone else. Furthermore, even simple transfers of assets, including most "spot" contracts, implicitly involve originative transactions in the form of previous transfers and principals in the form of alternative claimants—e.g., potential "true" legal owners. Most exchange thus involves several parties in a sequence of transactions, because of the desire of economic participants to reach specialization advantages and the chain of asset transfers. As a minimum, exchanges therefore involve at least three parties in a sequence of at least two transactions (Figure 1).

Figure 1. Generic sequential exchange with three parties



Sequential exchange encompasses specialization in the tasks of principal *P* and agent *A*, as well as multiple rights. These include all types of delegation and separation of ownership and control—e.g., between shareholders and managers, owners and possessors, mortgagors and mortgagees, etc. Consequently, new transaction costs now come into focus, driven mainly by the risks that the agent may lack or exceed the powers to commit the principal or that either the owners or the third party acquirers *T* may be dispossessed or deceived. Acquiring third parties now suffer much greater information asymmetry than if there was only uncertainty about the good's physical quality. For an impersonal market to function properly, this information asymmetry about the agent's legal title or power to contract needs to be overcome.

This does not mean that analyses of single transactions are irrelevant. Indeed, all sequential exchange is composed of a series of single transactions. Moreover, when parties are unable to improve the institutions needed to solve title problems, or when these institutions work well, it seems appropriate to focus on the interparty conflicts that characterize such single transactions. These conflicts are relatively well served with private formalization services, provided by professionals working for the parties to the transaction. For instance, having the contract written down, and perhaps ensuring that it has a certain quality by having it prepared by lawyers and authenticated with the presence of witnesses and professionals, will make it easier for judges to identify the intent of the parties to the contract. Given that the effects of single transactions are limited to the parties, it makes sense to let the same parties choose which kind of private formalization they want and from whom they want to acquire it. For this reason, private formalization is inadequate, however, for supporting sequential exchange, because it tends to leave the interest of third parties unprotected. Protecting third parties is the driving force behind the institutions for "public" contract formalization in which we are most interested.

Let us now examine a representative sample of transactions, to show how they differ from single exchange, how they are present in most economic activity, what they have in common and how they differ from each other.

3.2. Sequential business exchange

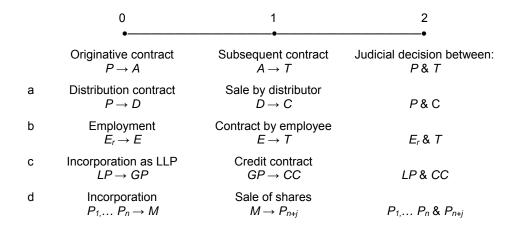
Perhaps the simplest sequential exchange imaginable is one in which a producer relies on a distributor to sell its production to the distributor's customers (Figure 2.a). This arrangement achieves specialization advantages because using distributors allows producers to focus on production and to reach a larger market. In turn, distributors can focus better on distribution, sell a wider set of products and be closer to their customers.

The two transactions are also clear. The originative transaction between the producer, P, and the distributor, D, and the subsequent transaction between the distributor and the customer, C. Customers are most often the least informed party in this situation. In particular, they are generally unaware of the quality of the seller's legal title. Ideally, in case of a dispute (arising, for instance, from default of payment by the distributor to the producer), they would like the judge to decide that the good remains with the customer and the producer gets only a claim for indemnity against the distributor. This is probably a sensible solution if the producer has chosen the distributor voluntarily, especially if both the producer and the distributor are professionally and repeatedly playing this game. Producers will then have good incentives to choose reliable distributors, and distributors will have good incentives to develop proper safeguards.

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⁸ Only some purely personal services are really single exchanges, and this only in the absence of slavery.

Figure 2. A sample of business sequential exchanges



Our second business example is equally simple: in an employment relation we have an originative transaction by which employer E_r hires employee E_r leading to subsequent transactions in which the employee interacts with a third party, T (Figure 2.b). This third party should worry about the power of the employee to commit the employer, and how the judge will decide when the employee exceeds such power. For similar reasons to the previous case, it will be reasonable for the judge to protect the third party. The rationale, as before, is that employers are the ones freely choosing and controlling employees.

In these two cases, the judge has little difficulty verifying that both the producer and the employer had consented to be committed by, respectively, the distributor and the employee. Such consents are made more or less obvious by the fact that the good had been entrusted to the distributor and the employer had been publicly acting as such. In contrast, things are different with company contracts, as they often lack such public, verifiable consequences.

Imagine, for instance, a third case in which two partners create a limited liability partnership, LLP, with a general partner under unlimited liability and a limited partner under limited liability (Figure 2.c). Consider the possibility that, in a subsequent transaction the general partner borrows from company creditors falsely claiming that the limited partner is subject to unlimited liability. In cases like this third example, the judge will face serious difficulties if the originative contract remains private and, as a consequence, does not produce unequivocal consequences. In previous examples, possessing a good and acting as an employee were publicly observable facts. In contrast, a partner's liability regime is an abstract feature of the originative incorporation contract, which could remain private and, therefore, be manipulated in an opportunistic manner. At the very least, it would need to be explicitly included in all subsequent contracts for these to be implemented with a modicum of guarantees.

⁹ There is no need for the subsequent transaction to be contractual. For example, A may commit P because his actions damage T, generating extracontractual liability to P when A is an employee of P.

Many other corporate transactions pose similar difficulties. A basic aspect may be that it is unclear who has legal power to commit a company. Typically, partners or shareholders delegate to a corporate board or manager M, who then enter into all sorts of contracts with third parties: they may, for instance, sell unauthorized shares to new shareholders P_{n+j} , or exceed the limits of the company's objects clause (Figure 2.d). For some of these transactions, the authority of the company organs and agents may be easy to verify for some companies. For many others, however, it will remain hidden and non verifiable.

Many other attributes of companies may also be hard to verify. In particular, both company and partners' creditors will be most interested in knowing which assets are owned by the company and by its partners. There are plenty of incentives here for opportunistic behavior in both directions. In addition to incentives to exaggerate the assets that back debts at the time of contracting credit, there are also incentives to move assets in or out of the company depending on company and personal circumstances.

In principle, as with partners' limited liability, clauses on all these aspects could be explicitly included in subsequent company and personal contracts. This inclusion would be very costly and unreliable, however. Registration of originative corporate contracts provides a much more efficient solution. It provides a simple way of implicitly including such originative contracts in all subsequent contracts, offering a modular design for economic activity, ¹⁰ and, crucially, doing so in an easy-to-verify (i.e., hard-to-manipulate) manner.

3.3. Sequential exchange in real property

Compared to the previous business cases, in real estate transactions the roles of principal and agent are sometimes less obvious, even though the structure of the problem is identical: (1) a principal and an agent subscribe an originative contract—sale, mortgage, lease, etc.—, (2) the agent contracts with a third party in a subsequent contract—e.g., the owner sells or mortgages the land again—and (3) a judge may be called to decide. In these cases, the agent often cheats by hiding a previous transaction and pretending to transfer a given right that is apparently unaffected by the hidden transaction: e.g., pretending to convey full title or to grant a first mortgage, or to sell the land free of encumbrances. The judicial decision will, in essence, allocate priority access to the asset, between the principal and the third party, awarding the losing party a mere claim against the agent.

A double sale of land is a good example of the implicit nature of the agency relationship (Figure 3.a). The owner who sells the same land twice can fruitfully be seen as cheating on his duties as an agent of the first buyer to whom he has a duty to not sell again. The judge will give the land either to the principal (the first buyer) or to the third party (the second buyer), while leaving the losing party with the right to claim an indemnity from the former owner (the agent). Something very similar happens with second mortgages: the first mortgagee acts as principal, the owner as agent and the second mortgagee as the third party (Figure 3.b).

¹⁰ See, mainly, the pioneer work by Simon (1962), and, closer to our topic, Smith (2006, 2007, 2008 and 2009).

For many originative transactions, both buyers and sellers may play the role of principals and agents in different circumstances, with respect to different subsequent transactions. In fact, each of our previous cases presents a typical conflict in each transaction, not the transaction itself. For example, in a double sale, the owner is an agent with respect to his obligation not to sell the land to another buyer after selling it to the first buyer, who acts as a principal. However, a buyer of land may also act as an agent with respect to the obligation to pay a deferred purchase price to the owner. Imagine, for instance, that the buyer resells the land to an innocent third party before having paid the agreed price to the seller (Figure 3.c).

Similarly, a lease may pose risks in both directions, to both the lessor and the lessee. The owning lessor may sell the land to a third party who might then try to evict the lessee or get only a claim against the seller if the judge so decides (Figure 3.d). In the opposite direction, a lessee could abuse possession to pose as an owner and sell the land to someone else (Figure 3.e).

In addition, a second conceptual duality arises because the survival of property makes a long chain of transactions possible so that, in most property cases, a current subsequent transaction will be the originative transaction of future subsequent transactions on the same asset. Similarly, what is now an originative transaction was in the past the subsequent transaction of a previous originative one.

Figure 3. A sample of sequential exchanges in real property

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	•	•	•
а	Originative contract $P \rightarrow A$	Subsequent contract $A \rightarrow T$	Judicial decision between: P & T
b	First sale $B_1 \rightarrow O$	Second sale $O \rightarrow B_2$	$B_1 \& B_2$
С	First mortgage $M_1 \rightarrow O$	Second mortgage $O \rightarrow M_2$	$M_1 \& M_2$
d	Sale of land on credit $O \rightarrow B_1$	Buyer sells before paying $B_1 \rightarrow B_2$	O & B ₂
е	Leasing $L \rightarrow O$	Owner sells $O \rightarrow B$	L & B
f	Leasing $O \rightarrow L$	Lessee sells $L \rightarrow B$	O & B

4. Common problem and common solution

4.1. The problem

All these transactions share a common structure: an originative contract between principal and agent, and a subsequent contract between the agent and a third party who suffers information asymmetry about the legal title of the agent. Given that the agent's title is a product of the originative contract, this is the same as suffering information asymmetry about the originative contract.

In all these cases, fraudulent subsequent transactions are made possible because, as a consequence of the originative transaction, agents become in possession of assets or are placed in a position in which they seem to have power to contract in the name of the principal. For example, a lease of land gives the lessee the possession of the land and puts him in a good position to pretend to be the owner when selling to an innocent third party. Similarly, an employee will tend to be seen as authorized to commit the firm. Note that our focus has been different in business and real property cases, but the problems they pose are not really different. It is true that, for business transactions, we have assumed that the agent did have a legal right to contract while, for land, we focused on cases in which the agent did not have such a right. However, we could have been comparing the case of a merchant who contracts for another merchant to take custody of some merchandise with an explicit agreement not to sell it. This is the same case as a buyer of land who allows the seller to keep possession of it. Of course, in most legal systems possession produces different legal effects for movables and immovables but this, despite being part of the solution, does not affect the structure of the problem. Nor is there a difference in the potential for collusion between parties to the originative contract: it is equally possible, let us say, in a company as in a second sale or a second mortgage. In these latter cases, the parties simply hide the previous contract until the money changes hands in the subsequent contract, cheating the innocent acquirer. They can even choose opportunistically according to the evolution of the market price, if the indemnity is not related to the market price but to the selling price.

Conflicts triggered by these sequences of contracts are also of the same nature, as the judge has to adjudicate either an asset (the property) or some sort of priority between the mortgagees or between claimants to use the asset, leaving the losing party with the much less valuable possibility of claiming an indemnity from the agent.

If judges always rule in favor of the uninformed party (the acquirer), they will make the information asymmetry irrelevant for third parties but owners will be in danger of dispossession. This would even be bad for acquirers: they would be very secure against possible claims by past owners but very insecure with respect to misbehavior by possible future agents. Similarly, if judges always rule in favor of the principal (the owner), the information asymmetry suffered by third parties will hinder trade. Even true legal owners would have difficulties selling or using their assets as collateral for credit.

4.2. The solution

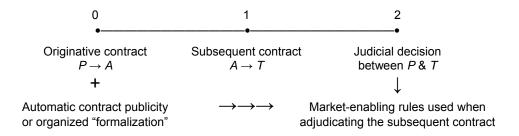
Strengthening property rights increases transaction costs and reducing transaction costs weakens property rights. Balancing this tradeoff is a losing proposition: Economic growth requires both secure property rights to encourage investment, and low transaction costs to improve the allocation and specialization of resources. It is therefore up to legal institutions to overcome the tradeoff. They do so by applying contract or property rules in a given context but with the appropriate conditions, which greatly reduce damaging side effects for, respectively, security of property or transaction costs.

When the law applies a contract rule, it does so after the owner has consented, and granting or denying their consent allows owners to protect their property. This is the solution invented in the Middle Ages under the Merchant Law: when merchants entrust possession of their goods to other merchants, the judge will grant the goods to third party innocent acquirers in subsequent transactions. Similarly, when shareholders incorporate a company and appoint its representatives they are consenting that their property rights be diluted in favor of the third parties who will start contracting with the company. There is a potential dilution of property rights but, being decided by owners, it should not cause much damage.

Conversely, when the law applies a property rule, it does so only after the owner has complied with publicity requirements that greatly reduce transaction costs for all potential third parties in the market. For example, in a double sale of land the judge will give the land not to the first buyer but to the first buyer to make the purchase public. In other words, by not making the purchase public, the first buyer is implicitly consenting to dilute his property right, so that a contract rule will be applied to adjudicate a possible second sale that is made public first. Similar solutions are applicable to all previous examples.

The key issue is that judges cannot apply these rules automatically: they are subject to conditions, and these conditions are essential to overcome the tradeoff between property enforcement and transaction costs. Given the sequential nature of the exchange, all systems have to make sure that principals remain committed to their choices: Imagine a merchant who, after placing his merchandise in the hands of a distributor who does not pay him, claims that the distributor was not authorized to sell it; or shareholders who grant full powers to a manager but, when he makes a huge mistake, renege from him and claim that he lacked legal powers. If their point is upheld by the judge, the third party would get only a claim for indemnity against the manager. Commitment is also important in land transactions. In a double sale, the owner and the first buyer can collude in different ways. For instance, by presenting the first sale only when land value moves above the expected indemnity cost.

Figure 4. The role of contract publicity and formalization



The judge therefore needs to verify some element of the consent given or the publicity produced in the originative transaction (Figure 4). This can be done informally, when the originative transaction itself or the activities it gives rise to inevitably publicize the relevant information as a byproduct. An informative transaction in this regard is, for example, that leading to a commercial seller gaining possession of merchandise. Similarly, the scope of employees' powers can often be easily ascertained by observing them perform the usual tasks of their jobs. Otherwise, explicit procedures need to be implemented to, in essence, make public the key consensual elements, those affecting third parties. Such elements include, at least, the date and the information necessary to apply the corresponding rule. For example, the incorporation of a company requires the date, name, founders, capital, decision rules, etc; and purchases and mortgages of land require, at least, the identification of the parcel and the transactors.

Broadly speaking: when transactions are public by their very nature, the law applies a contract rule, which reduces transaction costs, protecting the enforcement of property rights by having the principal choose the agent and triggering the contract rule only as a consequence of the agent's appointment. On the contrary, when transactions might remain secret, the law tends to enforce a property rule, which guarantees property right enforcement, but with the condition that the originative transaction is made public, which guarantees low transaction costs for third parties (Table 1.

In fact, situations are not all-or-nothing. Instead, there is a continuum of situations. For instance, in most transactions, there is always some degree of automatic publicity, which may be sufficient, especially for low-value transactions. In many transactions, a mixture of publicity mechanisms is applied for different dimensions. For example, possession of real property may play a publicity role for some real rights which produce notice (e.g., some leases) but not for others which are abstract in nature (e.g., ownership, mortgage).

In any case, having some elements of the originative contract public and verifiable ensures, either, that parties to that originative contract are committed to the contract rule—that is, right holders cannot deny they have given consent to diluting their rights, or that enforcing the rule of property will not harm innocent third parties. In essence, it makes sure that judges and third parties base their decisions on the same information.

Table 1. Publicity in business and real property contracts

Contractual areas	Main consequences of applying the contract rule	Protected economic good	Contractual publicity
Movable property	Good-faith purchasers retain ownership of what they have purchased from non-owners	Efficient allocation of resources	Informal, via possession and notoriety of the commercial nature of the seller and the nature of the sold goods
Agency	Agents commit their principals against good-faith contractual and non-contractual parties	Specialization by delegation of functions	Mixed: both informal through notoriety, and formal via public advertising and registration
Corporate	Company counterparties are protected against defects in the formation of the corporate will and have priority over the shareholders' personal creditors	Mainly, accumulation of capital, diversification of risks and specialization of managerial tasks.	Formal, via public filings at company and securities registries
Real property	Third party acquirers can examine the quality of title at the recording office or are assured of the granter's rights by the registry	Efficient allocation of land, use of land as collateral for credit	Formal, via recording of deeds (or titles) and registration of rights

Note: For the sake of simplicity, exceptions are omitted (e.g., formal publicity of security interests in movable property).

5. Difficulties faced by the law of impersonal transactions

Our overview of transactions suggests that the prevalent solution for impersonal market exchange is to enforce contract rules to protect innocent third parties in subsequent contracts, reducing transaction costs without damaging property rights. Damage to property rights is limited because right holders still have to grant their consent. They do so by choosing the agent and activating the contract rule through an explicit legal act such as entrusting possession or filing documents in a registry. In property registration, the registry additionally acts as custodian of right holders' consents.

Enforcement of property rules can therefore be seen as an exception, and it entails making originative contracts public—the most prominent example being the recording of property deeds. Moreover, the scope of this exception is on the decline. In corporate law, most jurisdictions now protect innocent third parties against legal defects in the corporate decision-making process; and, even if shareholders are free to introduce limitations in articles of incorporation and representation powers, these limitations are increasingly ineffective against innocent third

parties.¹¹ In real property, privacy and recording of deeds are being replaced in many countries by land registration, which tends to guarantee indefeasible title to innocent acquirers.

Significantly, contract rules covering many commercial and financial areas were applied for business trade early on within the medieval Merchant Law (Berman, 1983, pp. 348-350). However, Western law has taken more than ten centuries to apply contract rules when applying them efficiently requires supporting organizations. Governments have struggled for most of these ten centuries to organize land registries that could make their application to real property possible (Arruñada, 2003). Similarly, company registries, also invented within the Merchant Law, were adopted by most governments only in the 19th century (Arruñada, 2009). This difference is explained by the fact that applying efficient default rules (such as applying a contract rule to commercial exchange) do not require organizational support: they work on the basis of publicity produced in the market, without any organization. This explains why they were widely applied after their inception in the Middle Ages.

The delay has arisen in developing the public organizations needed for efficient enforcement of market-enabling rules: mainly public registries for recording and/or registering companies, land conveyances, mortgages and other security interests. They, too, started to be proposed by cities and merchants back in the Middle Ages but were only created much later, often unsuccessfully. Most countries in the world have in fact run company and land registries for more than a century; however, only a few have achieved functional registries, and some of these only recently. In addition to the common difficulties of public administration, functional legal registries face two additional hurdles. First, the value of their services disappears altogether when they are unreliable, because of corruption or poor organization. Second, they compete head-on with lawyers and notaries who, both as individual professionals and as a group prefer a weak or dysfunctional registry, which increases the demand for most of their services.

The struggle for market institutions can thus be pictured as a battle between two different technologies and the specialized resources using them: the artisan manufacturing of contracts by lawyers and notaries and the industrial production of "legal commodities" by default contract rules and organized registries. In this context, something close to a luddite attitude is still observable when legal professionals oppose standardization of legal acts and services, or when they claim the higher quality of personalized service. It is revealing that the Merchant Law, by which contract rules were created, developed without relying on and, in fact, in disdain of the established legal professions: "In all types of commercial courts not only were professional lawyers generally excluded but also technical legal argumentation was frowned upon" (Berman, 1983, p. 347).

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¹¹ For instance, when a board of directors goes beyond its powers (Grossfeld, 1973, pp. 39-45; Lutter, 1997, pp. 131-35), and in cases of defective incorporation (Buxbaum, 1974, pp. 23-29). Armour and Whincop also assert a shift in English law towards granting more protection to third parties (2007, p. 459), which they attribute to the greater monitoring ability of corporate principals (2007, p. 459). However, this is just one of the factors in action. Increasing demand for specialization between principals and agents and the greater gains obtainable from impersonal trade are also important. Armour and Whincop also argue that the Internet makes consulting registration easier, which might favor shifting responsibility again to third parties (p. 459). This responsibility would, however, be based on registered information (constructive notice and so on).

Obviously, the desire to preserve rents and quasi-rents constitutes a major stumbling block for most efforts to create or reform public registries. The added twist in this "Institutional Revolution" is that luddites are not opposing business entrepreneurs, as they did in the Industrial Revolution, but mostly civil servants. In this conflict, the side of modern formalization technology is especially weak, even after a registry is created, when registrars are paid a fixed salary and, consequently, have little interest in providing a valuable service to users. Understandably, in many countries registries end up being captured by and subordinated to lawyers and notaries. ¹²

Therefore, the delay in the institutional support of impersonal exchange is probably related to the simple fact that mainstream law first developed for facilitating personal exchange. Consequently, most legal resources are still adapted to personal exchange, including not only the human capital of judges, scholars and all sorts of law practitioners, but also other intangible assets, such as conceptual frameworks and academic curricula. Understandably, the owners of these resources resist change, but sunk costs and the conflicts of interest they generate are not the only difficulty. Conceptual and theoretical models are also important obstacles to the introduction of market-enabling legal changes. Curiously, public formalization institutions have been paid uneven attention: substantial by development experts, little by scientists who are better placed to advance knowledge in this field.

This lack of scientific attention is partly explained by the focus of both economics and law on the type of transaction that hardly needs public formalization. Both have focused their attention on solving the problems between parties to the contract. Both disregard the fact that a key problem for impersonal transactions is the information asymmetry faced by third parties who are entering into a transaction affected by a previous, originative, transaction. This applies to economic analyses which do not distinguish between contract and property rights (Merrill and Smith, 2001a), dealing instead with contract rights that are enforceable only between the parties to the private, originative, contract; or, perhaps most often, with the conditions for private rights on property, whether they are enforced as property or as contract rights.

More importantly, it also affects most legal treatments, which take as their references cases in which legal effects are triggered by private contract alone. They thus disregard the fact that for most transactions in today's economy private contracts alone do not have effects on third parties. Alternatively, in the best of cases, they treat such third-party effects as mere exceptions, despite being by far the general case. For example, it is considered that transactional documents that provide evidence of the bargain between company founders or property transactors actually incorporate a company or transfer property rights, when in fact in modern legal systems—whatever type of registration law is used—such documents either have no effects on third parties or have them only exceptionally. In order for this traditional paradigm to keep a framing role, first it is stated that, for example, a memorandum of association or a transfer deed have effects creating a company or transferring property. Second, the protection provided to third parties by the fact that the parties to the originative contract omitted a "requirement" to record such

¹² In such a context, applying the line of argument in North, Wallis Weingast (2009), paying some rents to bureaucrats may be necessary to ensure that they work in a viable equilibrium with professionals, especially when the latter also enjoy rents.

documents is treated as a mere exception regarding such effects.¹³ In a nutshell, the exception becomes the general rule, and the rule an exception, as if the treatment of third parties were not really the key issue.¹⁴

Consequently, both economic and legal analysis often fail to provide a sound basis for understanding the function and organizational requirements of formalization institutions. Framing the analysis with this traditional paradigm leads to underestimation of the role played by public registries and, correlatively, to overestimation of the function of informal solutions (possession, apparent authority) and private formalization. The latter, in most cases, can at most play a complementary role. The unsuitability of the paradigm makes it difficult to adapt formalization systems to meet the demands of the modern economy. It also helps explain the survival of unfounded legal exceptions, which generate grey areas in which impersonal contracting becomes impossible.

Mainly, the traditional paradigm sustains all sorts of private palliatives, both prior to and subsequent to the contract—mainly, lawyering to draw up personal safeguards and validate private contracts or to litigate in any additional conflicts arising. These solutions are idiosyncratic and therefore costly, and are of doubtful effectiveness and variable quality. They can be judged as "artisan", in contrast to the "industrial" solutions required for impersonal transactions, which require low unit costs and standard legal attributes for subsequent transactions. This institutional development is thus similar to the standardization achieved by mass production in the 19th century and the secured quality provided by "zero-defect" manufacturing in the late 20th century. This is the type of solution which 19th-century legal experts started to build but which their successors do not always grant all the value it deserves.

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¹³ The good faith third parties who are unaffected by the private contract are, for example, company creditors of unregistered companies, personal creditors of their founders, or the purchasers of land from the owners on record who have previously sold to persons who did not record their deeds.

¹⁴ Similarly, good faith third parties are sometimes considered exceptional. For example, Armour and Whincop assert that "transactions with third parties that are entered into by directors in breach of their fiduciary duties.... may leave the outsider liable either to have an executory contract set aside or to a proprietary claim by the organization for restitution of its property, unless the counterparty is in good faith and gives value" (2007, p. 456, emphasis added).

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