The law of impersonal transactions

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Published as Chapter 4 in Eric Brousseau and Jean-Michel Glachant, eds.,
Manufacturing Markets: Legal, Political and Economic Dynamics,
Cambridge University Press, Cambridge UK, 2014, pp. 58-77.

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 rightholders 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 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.

Keywords: Property rights, formalization, impersonal transactions

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4.1 Introduction

This chapter develops a theory of the institutions supporting impersonal transactions by publicly registering private contracts. It sees contract registration 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 the 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.[1] Sequential exchanges are needed to obtain the benefits of specialization in the tasks of principals and agents: between landowners and farmers, employers and employees, shareholders and managers, etc. 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

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Spanish Ministry of the Economy, through projects CIT3-513420 and ECO2011-29445.

[1] Using an agency conceptual framework allows me to pose the theory in general terms, encompassing both business and property transactions. This agency structure is clearer in company registries than in property registries because, for property, which party plays the role of agent or of principal depends on the type of fraud. But the agency structure is also present in all property transactions. This becomes clear when we observe, for instance, that in a second sale the seller is acting as an "agent" for the first buyer, even if this use of the agency concept is unconventional in legal terms, as

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, if the business turns out badly, principals will be inclined to deny such authority. This is why 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. The terms "property rule" and "contract rule" echo the property and contract rights that the original owner retains in each case.[2] Their effects are clear. Take the simple case in which an agent

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the first buyer does not intend the seller to act in this capacity and the seller does not portray herself as an agent of the buyer.

[2] These rules are similar but distinct from the "property" and "liability" rules defined in a classic work by Calabresi and Melamed (1972) because here the rules are defined in the context of a three-party sequence of two transactions instead of a taking affecting only two parties. Moreover, my analysis focuses on the role played by the parties in each transaction, disregarding that current third parties will often 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* (Merrill and Smith 2001a).

exceeds his legal powers when selling a good to an innocent third party (that is, a good-faith party who is uninformed about the matter in question). 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 consent[3]—but will worsen the information asymmetry suffered by all potential third parties with respect to 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.

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 *in rem* 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

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[3] See Merrill and Smith (2001b: 780-89). Note that the economic literature often uses a broader concept of "property rights" that includes both property and contract rights.

keeping possession of movable assets or filing their claims to immovables 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. But this weakening of property is limited since principals choose the agent who, for instance, they entrust with possession or appoint as their representative, this being the moment when they implicitly "choose" a contract rule

The smooth operation of this switching of rules poses varying degrees of difficulty for different transactions. The difficulty is minor when the originative contract inevitably produces verifiable facts, such as the physical possession of movable goods or the ordinary activity of an employee. For these cases, judges can base their decisions on this public information, which is produced informally. Conversely, greater difficulty arises when the originative contract produces less verifiable facts, making this "informal" solution harder to apply. Such an informal solution may even be impossible if the contract remains hidden and its 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 enter and preserve at least some information on the originative contract in a public registry. Registration is costly so is not universally efficient, especially in situations of low demand for impersonal exchange, and it requires independence and public access. First, to prevent interested manipulation and thus provide verifiability, the registration process necessarily has to be independent of all the parties involved, including parties to the originative contract. (This requirement of independence makes registration wholly different from documentary formalization, which is designed to safeguard the relation between parties to the same contract.) Second, at least the 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 beforehand which rules are applicable to any subsequent contracts. In essence, registration becomes the means to make the voluntary choice of market-enabling contract rules verifiable by courts and therefore commits principals to their choices.

The analysis 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 chapter proceeds as follows. Section 3.2 clarifies the nature of impersonal exchange. Section 3.3 introduces the main concepts used in the analysis: single and sequential exchange, and originative and subsequent transactions. Section 3.4 points out the importance of sequential exchange for specialization and examines a representative sample of sequential exchanges in business and real property. Section 3.5 identifies the nature of the title problem present at the core of all these exchanges and the solutions that are applied to solve it. Lastly, section 3.6 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.

4.2 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]

However, in most economic exchanges, contractual performance is based on personal characteristics of the parties, such as their wealth, solvency and reputation. First, most trade between parties who know each other is clearly personal as it relies on their mutual knowledge and expectations of their future trade. Similarly, much of the trade with strangers also requires gathering information to know which performance assurances—for instance, reputation—they offer; so it is also personal.

Second, trade also retains key personal elements when performance assurances are not produced by the parties themselves but by specialized assurance intermediaries, such as financial institutions or rating agencies. In such cases, trade remains personal to the extent that it is based on the reputation of the intermediaries and their knowledge of their clients. Similarly, trade is also personal under community responsibility systems, when all members of a group (for instance, all merchants of a particular city in late medieval times) are liable for the behavior and contractual obligations of each of its members (Greif 2002, 2006). Such a system allows strangers to trade with group members on the basis of limited personal information, just enough for them to unambiguously know which individuals are members of which groups and which groups are dependable.

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[4] See mainly North and Thomas (1973), Hayek (1982), Granovetter (1985), North (1990) and Seabright (2004).

Moreover, it also requires personal monitoring within each group. Both assurance intermediaries and community responsibility therefore make transactions more impersonal but still retain important personal attributes.

Lastly, trade is often considered to be impersonal when parties can solve their conflicts before an independent judge (e.g., North 1990: 34-35; 1991). However, this reliance only reduces the amount of personal information required for transacting, as parties still need to ascertain at least how solvent their obliged counterparties are. Even with perfect judges, creditors must worry about how likely it is that their debtors might become judgment proof. Insolvency carries little stigma today but even in old times, when insolvent debtors ended up in prison, jailing them must have provided little joy to their creditors. Therefore, as in the previous cases, judicial enforcement still depends on personal attributes, and judicially-supported trade still remains substantially personal in nature.

To the extent that personal attributes are present in all these cases, parties must spend resources on developing personal guarantees and producing knowledge about them. Also, to the extent that such guarantees remain weak, contractual enforcement is unreliable, prone to conflict and thus costly. Lastly, where there is a risk of contractual default, parties withdraw and waste trade opportunities. Therefore, relying on personal exchange precludes profitable exchanges between unknown parties and limits specialization opportunities and efficient reallocation of resources, hindering economic growth

To expand the scope of transactions and exploit the benefits of comparative advantage more fully, parties must be able to trade without any knowledge of their respective personal characteristics, which requires making contractual performance independent of such characteristics. This greatly simplifies the parties' information problem but it can be achieved only by defining rights in respect of assets instead of persons. Furthermore, several caveats are in order. First, defining rights directly on assets makes trade harder because they survive any trade unless the rightholder consents to the trade. Second, this characterization in terms of assets is superficially inexact for some business transactions in which no real assets are involved, as we will see below. Yet the substance of the case is the same to the extent that the nature of rights hinges on the actions available to the rightholder to enforce them. Third, 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. But this is not sufficient in itself because, without some form of registration, judges would have a hard time applying efficient rules, as we will see shortly.

4.3 The information structure of single and sequential exchange

Judges solve two main types of conflict, 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 additionally involves in a subsequent transaction at least a third party to the originative transaction—some other person who now contracts with the agent. Both exchanges pose different problems of information asymmetry.

Information asymmetry in single exchange is well represented by 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, used cars on sale tend to be those of poorer quality. This information asymmetry with respect to material quality poses a serious threat to trade, and parties must dedicate plenty of resources to produce information and provide all sorts of quality assurances. 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 may specify in the contract the car's expected level of performance. 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 on the judge to enforce the contract, using it as a source of primary evidence for the judge's decision.

An aspect of this single-exchange "lemons" example illustrates the information asymmetry 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" (about the prior originative transaction between the previous owner and the current seller) may be even more serious than that about material quality, which most often only causes a partial loss. It is also harder to solve by parties alone because, however much title examiners strive to clarify title, title evidence may remain hidden in the absence of registries. And developing registries faces a collective action problem whose solution exceeds the power of individual parties.

The task of the judge is also harder and more critical. Harder because the judge must decide based on the originative contract between the principal-owner and the agent-seller, which they can easily manipulate, especially when it is not available to the third-party-acquirer. More critical because, instead of simply solving a conflict between the parties to the contract, by comparing actual and promised performance, the judge now has to adjudicate the car to one of the two claimants—the previous owner and the buyer—, granting the losing party a mere claim for indemnity against the seller. In fact, cases of title conflict start because such a claim is much less valuable than its alternative or is unenforceable.

This gap in value explains that the effect of this type of judicial decision is substantial. Expectations about how similar cases will be decided define 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. Owners' attempts 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. The rest of the chapter presents a general theory of the institutions used to produce such evidence: contractual registries. Their function is, in essence, to provide reliable evidence for 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.

4.4 The prevalence of sequential exchange

The scope of single exchange is severely limited because most specialization necessarily involves sequential exchange—both, originative and subsequent transactions. This is mainly so when one of the parties to the contract is the agent of someone else. Furthermore, even simple transfers of durable assets implicitly involve originative transactions in the form of previous transfers and principals in the form of alternative claimants—e.g., potential legal owners and, in general, any potential claimants of other rights on the asset. 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.

Sequential exchange encompasses specialization in the tasks performed by principal and agent, including all types of delegation and separation of ownership and control—e.g., between shareholders and managers, owners and possessors, mortgagors and mortgagees, etc. This specialization creates new transaction costs, 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 may be dispossessed or deceived. These acquiring third parties now suffer much greater information asymmetry than if there was only uncertainty about the good's material quality. This information asymmetry about the agent's legal title or power to contract needs to be overcome for impersonal markets to function properly.

Let us now examine a representative sample of business and property transactions in different markets, to observe how they differ from single exchange, how they are present in most markets, what they have in common and how they differ from each other.

Perhaps the simplest sequential exchange is one in which a producer relies on a distributor to sell its products to the distributor's customers. First, an originative transaction takes place between the producer and the distributor and then a subsequent transaction happens between the distributor and the customer. 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.

But it also causes transaction costs. Customers 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 professionals repeatedly playing this game. Producers will then have good incentives to choose reliable distributors, and distributors will have good incentives to develop proper safeguards.

Our second case is equally simple: in an employment relation we have an originative transaction by which an employer hires an employee, leading to subsequent transactions in which the employee interacts with a third party. 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 legal acts of the distributor and the employee. Such consents are made verifiable by the visible 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 persons create a limited liability partnership, LLP, with a general partner under unlimited liability and a limited partner under limited liability. 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 contract, which could remain private and, therefore, be manipulated in an opportunistic manner. At the least, it would need to be explicitly included in all subsequent contracts for these to be implemented with a modicum of guarantees.

Many other corporate transactions pose similar difficulties, as it is often unclear who has legal power to commit a company. Typically, partners or shareholders delegate to a corporate board or manager, who then enter into all sorts of contracts with third parties: they may, for instance, sell unauthorized shares to new shareholders, or exceed the limits of the company’s legal purpose—what lawyers call the “objects clause.” For some of these transactions, the authority of the company agents may be easy to verify for some companies. For many others, however, it will remain hidden and non verifiable. 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 which by its partners. Furthermore, participants often have incentives for opportunistic behavior. Besides incentives to exaggerate the assets at the time of contracting credit, shareholders also have incentives to move assets in or out of the company depending on company and personal financial circumstances.

In principle, as with partners' and shareholders' limited liability, clauses on all these aspects could be explicitly included in subsequent company and personal contracts. But this inclusion would be costly and unreliable. A much more efficient solution is provided by entering originative corporate contracts in a public register. Registering these contracts implicitly includes them in all subsequent contracts in an easy-to-verify (i.e., hard-to-manipulate) manner.[5]

The structure of exchanges in real property is identical to that of the previous business cases: (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 real property 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; for example, 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.

However, compared to the business cases, in real estate exchanges the roles of principal and agent are more implicit and alternating. For example, in a double sale of land the owner who sells the same land twice can

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[5] It thus offers a modular design for economic activity. See, mainly, the pioneer work by Simon (1962), and, closer to our topic, Smith (2006, 2007, 2008 and 2009).

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 similar happens with second mortgages: the first mortgagee acts as principal, the owner as agent and the second mortgagee as the third party.

4.5 Common problem and common solution

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, the third party suffers information asymmetry about the originative contract. 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 on behalf 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.

Merely optimizing this tradeoff of transaction costs and property rights statically is a losing proposition. In the static tradeoff, applying property rules would favor earlier owners to the detriment of later owners and, vice versa, applying contract rules would favor later owners to the detriment of earlier owners. Economic growth benefits from and may often require both secure property rights to encourage investment, and low transaction costs to improve the allocation and specialization of resources. Therefore, it is often efficient to develop institutions that, at a cost, are capable of *overcoming* the tradeoff, maximizing value for acquirers without damaging owners.

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 Law Merchant: 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 to their property rights being weakened in favor of the third parties who will start contracting with the company. But, since this potential weakening of property rights is decided on by the 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 verifiable 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 his property right being weakened, 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 the judge does not apply these rules automatically: they are subject to conditions, which are needed to overcome the tradeoff between property enforcement and transaction costs. In particular, given the sequential nature of the exchange, all systems must make sure that principals remain committed to their choices. To illustrate this point, 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 think of a shareholder who grants full powers to a manager but, when he makes a huge mistake, reneges from him and claims 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 distributor or the manager. Commitment is the key in these examples. It is also key in land transactions. For example, in a double sale, the owner and the first buyer could easily collude and announce the first sale only when land value moves above the expected indemnity cost. Moreover, when a property rule is to be applied, commitment must also reach all potential third parties.

The common condition is that the judge has to be able to verify the consent given or the publicity produced in the originative transaction. 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 consensual elements that may affect 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 also requires the name, founders, capital, decision rules, etc; and purchases and mortgages of land also require, at least, to identify the parcel and the transactors.

The solution is therefore one of relying on public knowledge of originative contracts and, when such knowledge is not available, registering the contracts to make their content verifiable. Broadly speaking, when the law applies a contract rule, which reduces transaction costs in subsequent transactions, it protects owners by having them choose the agent and triggering an agent-mediated contract rule only as a consequence of the agent's appointment. Conversely, when the law enforces a property rule, which guarantees *in rem* enforcement of owners' rights, it does so with the condition that the originative transaction has been made public and verifiable, which also reduces transaction costs for subsequent transactions.

Of course, many situations are not all-or-nothing and, instead, there is a continuum. For instance, some degree of automatic publicity may be sufficient for low-value transactions and, in other cases, a mixture of publicity mechanisms is applied for different dimensions. For example, possession of real property may play a publicity-and-verifiability 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, rightholders cannot deny they have given consent to weakening of their rights, or that enforcing the property rule will not harm innocent third parties. In essence, it makes sure that judges and third parties base their decisions on the same information.[6]

4.6 Difficulties faced by the law of impersonal transactions

Our overview of transactions suggests that the solution for impersonal market exchange is to make it possible for rightholders to voluntarily dilute their property rights. More precisely, the solution is to either condition the enforcement of property rules to publicity, as in real property, or to directly enforce contract rules. Both solutions aim to protect innocent third parties in subsequent contracts, reducing transaction costs, without damaging property rights. Damage to property rights is limited because rightholders still have

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[6] A key characteristic of these judicial decisions is that they are based on information about the consent given by rightholders, not about the possible values of the disputed resources in the hands of the competing claimants. The latter problem is analyzed in the literature on property versus liability rules (see, for instance, Ayres and Talley, 1995; Kaplow and Shavell, 1996; as well as Krauss 1998, for an overview), which focuses on a situation in which a disputed right must be allocated between its owner and a taker

to grant their consent. Even in business transactions, they exercise their consent when activating the contract rule through explicit legal acts such as entrusting possession of movable goods, employing a worker or filing documents in a company registry.

Property rules can thus be seen as playing a declining role in both corporate and property law, and unconditional enforcement of them as an exception. 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.[7] In real property, privacy plays a decreasing role, and recording of deeds is 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 Law Merchant (Berman 1983: 348-350). However, Western law has taken more than ten centuries to apply market-enabling 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 Law Merchant, were adopted by most governments only in the 19th century (Arruñada 2010). This difference is explained by the fact that applying efficient default rules (such as applying a contract rule to commercial exchange) does not require

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(instead of an innocent third party), and the liability (instead of contract) rule has this second party compensating the owner.

[7] For instance, when a board of directors goes beyond its powers (Grossfeld 1973: 39-45; Lutter 1997: 131-35), and in cases of defective incorporation (Buxbaum 1974: 23-29). Armour and Whincop also assert a shift in English law towards granting more protection to third parties (2007: 459).

organizational support: they work on the basis of verifiable 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 Law Merchant, 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: 347).

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.

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. Owners of these intellectual 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.

Furthermore, contractual registries 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 registration. 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 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 against 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 against 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 documents is treated as a mere exception regarding such effects.[8] 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.

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

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[8] 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.

and, correlatively, to overestimation of the function of informal solutions (possession, apparent authority) and documentary 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 precisely the type of solution that 19th-century legal experts started to build but which their successors do not always grant all the value it deserves.

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