

Essays on Precedent and Statute

Essays over rechtersrecht en wetgeving

Proefschrift ter verkrijging van de graad van doctor aan de
Erasmus Universiteit Rotterdam op gezag van
de rector magnificus
Prof.dr. H.A.P. Pols
en volgens besluit van het College voor Promoties

De openbare verdediging zal plaatsvinden op
maandag 25 juni 2018 om 15.30 uur
door

Orlin Zhelimirov Yalnazov
geboren te Varna, Bulgarije

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This thesis was written as part of the European
Doctorate in Law and Economics programme



An international collaboration between the Universities
of Bologna, Hamburg and Rotterdam.
As part of this programme, the thesis has been submitted
to the Universities of Bologna, Hamburg and Rotterdam
to obtain a doctoral degree.



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Universität Hamburg



ACKNOWLEDGEMENTS

First and foremost, I would like to thank my supervisors, Michael Faure, Florian Faust, and Elena Reznichenko, for steering me through the innumerable academic, logopaedic, and operatic *péripéties* that accompanied the writing of this thesis. I also want to thank Marianne Breijer de-Mann, without whose help I would not have defended in this decade, and Lukas Böker, whom I hope to join for lunch again one day.

I have friends. Thanks to Ahmed for the cooking, to Akiva for черв, to Bernoldus for the business lunches, to Bryan for Rock & Wrestling, to Chih-Ching (Amy!!!) for her bottomless generosity, to Cintia and Malta for the bed last summer and tomorrow, to Comrade Blaustein for Euxine Law & Economics and the Blaustein Paradox, to Comrade Strządała for her Silesian hospitality, to Damiano for TAXI!!!, to Eka for her tzar-free Orthodoxy, to Giugiu for her patience and pesto expertise, to Joé for becoming the first German to circumnavigate Maksuda by *bussage* and for my Jericholaan residence, to Yu Nan (Nancy!!!) for the Chinese lava brandy, and to Salvini for her silken chat and golden shoes.

Благодаря и на Мая, понеже имам сметка.

Благодаря също на Колчо Добричлията, приятелката му Свилена, чичо Кольо, всички други кръчмари, Ачо, Анка от Петлешев, Владимир II, Пламена (!), Жоро Пилето, Любо, Атана, Пламен Птицата, Явчо, Христосчо, Арис и други знайни и незнайни, които много отдавна съм надрастнал.

Пачинка!

На последно място, благодаря на майка си и баща си, най-много разбира се за парите, но отчасти и за доброто настроение.

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Chapter I

INTRODUCTION

This volume comprises eight essays. All eight deal with one question – should we have laws made in courts or in parliaments? I say that it depends – courts are good for some laws, parliaments for others. Saxe compared laws to sausages, and advised those who like them against seeing them made. Here, I take his analogy, though not his prescription, a step further. I conceptualise law as an information product, and lawmaking as an exercise in production. Lawmaking has inputs and outputs, and technology is used to transform one into the other. The input is information – to make laws, we need to know what the world is like right now, how it may change, and what we desire it to be. The output is law. Law may, depending on input and technology, take on different forms. It can be vague (‘everyone should drive reasonably’) or specific (‘everyone should drive at a speed not exceeding 50 km/h in cities’). The ‘technologies’ between which we may choose are precedent and statute. Differences between the two being sizeable, our choice has significant repercussions for the cost of the input and the form of the output.

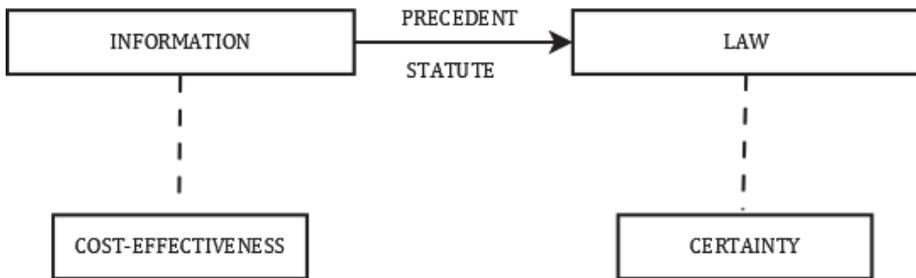


Figure 1: General Analytical Framework

The top part of the diagram shows my conception of the lawmaking process: information is ‘transformed’ into law through one of the two law-production technologies. The bottom part depicts the points of difference between the technologies which I take as my evaluative criteria. I will now move to describe each, moving from certainty through cost-effectiveness to technology.

I. Certainty

Law is among other things an information product. When the lawmaker declares something to be the law, he announces to all members of the polity that if he discovers that such-and-such events have taken place, he will take such-and-such action. When we say that ‘the law prohibits murder’, we mean that – assuming that the law is enforced - if someone commits murder, the state will subject them to coercive action. When we say that ‘breach of contract is unlawful’, we mean that the innocent party may ask the state to coerce the contract breaker into performing or paying compensation. ‘The tort of negligence’ denotes the idea that the state will force the negligent to compensate their

victims. When we say that the statute of limitations bars actions for debt after six years, we mean that the state will not deploy its coercive apparatus to enforce debts after that time. When we speak of the 'parol evidence' rule, we mean that whether the state will coerce someone into compliance with a contract depends only on that contract's written terms. When we say that no executive action is valid unless authorised by legislation, we say that one organ of the state will not engage in coercive action unless authorised by another.

All laws, be they substantive, procedural, facilitative, or hierarchic, serve to inform. They tell us what the state will do, and when, and to whom. The efficacy with which each law fulfils that informatory function may differ. If we say that 'negligence is a tort' and we leave it at that, then the addressees of that law are unlikely to be able to predict the state's actions with much confidence. The law does not say what negligence is, nor does it identify the coercive response of the state. An example might help. Suppose I am planning a bonfire in my front garden and I try to predict what the state will do if I proceed with my plans. I know there is generally a risk, serious though not high, that a neighbouring house will catch fire. I also believe that risk to be minimal in my circumstances because I am a fireman by trade. Further, I do not feel dutybound to safeguard my neighbour's property because I have never spoken to him. Even if I subject those factors to the most stringent of scrutinies, I cannot predict what the state will do if I go ahead with the bonfire. I do not know how grave a risk has to be to engage my liability, or whether my professional expertise counts, or whether I owe vigilance to all mankind or just to my intimates. Nor can my neighbour, if he sees me building a pyre, tell if he is protected, or how. Even if he is convinced that what I am doing is unlawful, the law is silent on the consequences of negligence. They might be as varied as a caution, a fine, money damages, an injunction, and imprisonment. Clearly, the deterrent effect of each, and accordingly my neighbour's precautionary actions, will differ with the sanction. Since the law only indicates that there will be sanction but does not say what it will be, it fulfils its informatory function only to a very limited degree.

The position would be different if the law were 'the tort of negligence imposes an obligation on everyone to avoid causing objectively foreseeable harm which sounds in damages equal to the harm suffered by the innocent party'. Under this second law, I can plan my evening entertainment more confidently. The word 'foreseeable' denotes a level of risk against which I can measure that of my neighbour's house catching fire. And I know that my vocation is irrelevant, the test being objective rather than subjective. My neighbour is also given a strong indication of how and when the state will protect him – it will only act if the risk comes to pass, and it will force me to pay money damages.

We may then say that, if law is viewed purely as an informational product, the second law is preferable to the first. Now, the question that I posed in the beginning is whether we should have laws made in parliaments or in courts. Evidently, if courts exhibit a systematic tendency to produce certain laws and parliaments to produce uncertain ones, then the courts are to be preferred. And vice versa. It is possible, and likely mandatory, to formulate this as a research question: as between the courts and the legislature, which produces more certain laws?

My answers are very technical, and need some more prefacing. For now, I will limit myself to explaining why I believe them to be relevant. In law-and-economics, the law is measured against the incentives it generates for members of the polity. If the law is uncertain, the incentives that it generates are muddled. Thus even an otherwise efficient law can, if uncertain, yield a great deal of inefficient behaviour in society. If it is not known whether starting a bonfire in a residential area is negligent, it would be difficult for insurers to price contents insurance. That pricing in turn is interlinked with house prices, house prices are interlinked with rents, and the real estate market is interlinked with the wider economy.

If this is too far-sought, I have a vivid example. Consider the impact of an uncertain negligence law on the behaviour of pharmaceutical companies. Suppose Pharmaceutical A is contemplating the sale of a medicine, knowing that there is a miniscule chance that some latent defect will cause harm to a small number of patients. Under the 'negligence is a tort' law, it cannot know if it will be held liable. Nor does it have any way of gauging its potential liability. It might well decide not to market the medicine, even if marketing it would be welfare-enhancing. Suppose now there is also Pharmaceutical B, which is contemplating the marketing of a different medicine. Pharmaceutical B is aware that there is a grave risk of serious harm to most patients, though a few are likely to survive unscathed. It might well interpret the law to say that it owes the potential victims no duty and take the medicine to market, even though doing so causes an aggregate loss to society. The problem here is that Pharmaceutical A picks one interpretation of a vague law and Pharmaceutical B picks another. Absent something else, a judge is as likely to accept one interpretation as another. If the law indicated to Pharmaceutical A that it could market its drug and face no or low sanctions and to Pharmaceutical B that it could not market its drug unless prepared to face huge liabilities, then each if rational would behave in a welfare-enhancing way.

The point which I am prodding at with all this is that legal uncertainty has costs. It deters desirable behaviour and it encourages undesirable behaviour. In law-and-economics jargon, there is an 'optimal' level of each activity. If the law is uncertain, there might be under- or over-activity. Not knowing how the state will react to some facts, some parties will choose not to act, even if their activities would be efficient. Other parties still will interpret the law as permitting them to profit from some inefficient activity. The cost of a law being uncertain is the sum of the foregone benefit from efficient activities and the cost of harm caused by inefficient activities. If the courts or the legislature produces systematically more certain laws, then uncertainty costs are minimised. This is one way in which the choice of law-production technology resounds in society.

II. Information

On my framework, there is a trade-off between the cost of uncertainty and the cost of information. So far, I have spoken only of the former. I will now explain what I mean by the latter. I have so far portrayed the problem of legal certainty as a choice between two formulations, 'negligence is a tort' and "the tort of negligence imposes an obligation on everyone to avoid causing objectively foreseeable harm which sounds in damages equal to the harm suffered by the innocent party'. Making a choice with the alternatives thus

framed is not at all difficult. We choose the more certain law, and everyone ends up better off.

Why, then, might a legal system end up with 'negligence is a tort'? My previous formulation only describes the cost of legal certainty from the perspective of law's addressees. But law, before it is addressed at anyone, must first be made. To make laws, the lawmaker, be he a judge or a legislator, must decide which behaviours are desirable and which are not. To make that decision, he needs information. Information is not costless. The more certain a lawmaker wishes to make a law, the greater the number of behaviours whose desirability he must consider. Accordingly, a fine-tuned law requires a greater investment in information than a general one. There is thus a trade-off between the cost of information, born by the lawmaker, and the cost of uncertainty, born by the general public.

For example, 'negligence is a tort' requires very little investment in information on the lawmaker's part. To promulgate such a law, he only needs to know that it is good that people act diligently when going about their day-to-day business. The more detailed formulation entails more choices. To say that only objectively foreseeable harm triggers liability for negligence, for example, is to render unforeseeable risks uncompensable. That choice shifts the precautionary burden onto potential victims. To make that choice, an efficiency-minded lawmaker needs to know who the cheapest cost avoider is. To discover this, he would need to find out, among others, who the potential victims are, what precautionary technology they can access, and what the cost of precaution is to them and to potential tortfeasors. Discovering all that is costly, and the cost is only incurred under a specific law – if the lawmaker restricts himself to saying that 'negligence is a tort', there is no need to acquire information at all.

That is why a lawmaker might favour 'negligence is a tort' over 'the tort of negligence is an obligation to avoid causing objectively foreseeable harm which sounds in damages equal to the harm suffered by the innocent party'. If the lawmaker bears the cost of information but not that of uncertainty – as would be the case if he were free from electoral pressures, as in an absolute monarchy or a dictatorship – a rational lawmaker would always choose the vaguer law. That is of course not the case in modern capitalistic societies. But even if the democratic process exposes the lawmaker to the full cost of uncertainty, there might be instances in which the ends of efficiency are best-served by an uncertain law. That is the case whenever the cost of information to the lawmaker is higher than the cost of uncertainty to the general public.

The latter point is best appreciated if we consider a potential perfectly precise negligence law. The second law in the example is not perfectly precise – it does not define 'objective', for example, nor does it say what an 'innocent party' is. To write a perfectly precise negligence law, the lawmaker would have to produce a list of all possible instances of harm, and choose between ones he desires and ones which he does not. To do that, the lawmaker would have to acquire complete information about every conceivable state of the world, and then to decide whether that state of the world is 'good' or 'bad'. A perfectly specific negligence law would indicate whether bonfires are allowed, and under what conditions, and at what times, and whether the manufacture of such-and-such drugs

attracts sanctions, with each drug identified by reference to its specific components, and what the quantum of those sanctions will be, to the cent, and when they are due, to whom, what happens if they are unpaid, and so on.

No country in the world has such laws, and for good reasons. Firstly, the information would be too costly to acquire. If the state could tell with perfect certainty what medicines it wishes pharmaceuticals to produce in the future, it could simply produce those medicines itself in the present, solving the problem of economic planning and disease in one go. The acquisition of such information, in reality, would be much costlier than the uncertainty from having a vague negligence law. Secondly, the incidence and significance of some activities – such as front-yard bonfires – is too low to warrant the up-front outlay on information necessary to regulate them.

If this is correct, then there is a trade-off between information costs and uncertainty costs. The point is relevant to the choice between precedent and statute, for the reason that the cost of information varies with the identity of the persons tasked with acquiring it, and also with the mechanism used to collect and aggregate it. For example, it is easier for me than it is for you to acquire information about the weight of my pet hamster or the temperament of my family members. I can observe those more easily because I am located ‘closer’ to the phenomena in question. The point translates to a cross-institutional context too: judges and legislatures observe different things and they have access to different mechanisms, so that there is systematic variance between the two. That variance sounds in information costs. The research question, then, is this: as between the courts and the legislature, which acquires information at a lower cost?

Like certainty, the question is of considerable practical import. Firstly, members of the lawmaking body – judges or parliamentarians – themselves possess very little information. They are dependent on the general populace for its supply. Parliaments invest large amounts of public funds in surveys, commissions, research, and so on, purely in order to make informed decisions about the content of laws. The judiciary, likewise, acquire information from the evidence they hear in cases. As any practitioner of law will readily attest, the compilation of evidence, its weighing, recording, and so on, are very costly. Such costs are incurred by society continuously, so long as there are parliaments and courts. Switching law production to the most cost-effective information-acquirer, then, can produce large, durable economies.

In addition, the assignment of law production tasks to institutions determines the optimal level of legal certainty. Suppose that it costs the courts £10,000 to acquire the information they would need to regulate front-yard bonfires, and that to the legislature the same information would cost £50,000. Now suppose, further, that the gain from having a certain bonfire law, say ‘bonfires are only allowed if more than 10 metres away from the closest residential building’, instead of the uncertain ‘negligence is a tort’, is £30,000. This accrues from fires prevented and from the utility bonfire enthusiasts who would otherwise mistakenly believe all bonfires to be unlawful derive from indulging in their hobby. If the courts make the law, then switching from the uncertain to the certain is efficient: £10,000 is spent for a gain of £30,000. If the legislature makes the law, on the other hand, promulgating the certain law is inefficient: society loses £50,000 to acquire

the information, but only gains £30,000 from the law it produces. If rational, we would only have the more certain law produced if its production is assigned to the courts. Under statute, the uncertain one is preferable. The choice of law production technology preordains the set of laws which we can viably adopt.

III. Technology

I have distinguished between two elements of law production: the cost of the input, information, and the form of the output, law. Precedent and statute are two technologies through which the input is converted into an output. Laws made by judges or legislatures might have a stable tendency to be more or less certain. The information each acquires can be systematically cheaper or dearer.

What I wish to do now, very briefly, is to highlight two differences between the courts and the legislature. The two explain much of the variance on both the input and the output side. Firstly, relative to the legislature, the courts are decentralised. There is usually one legislature, but many courts. Secondly, the legislature makes its laws at a discrete point in time. There is a day on which a statute is passed and from that day we may say that there is a law regulating the activities covered. Judicial law-production is temporally dispersed. A case is decided. We do not know if its holding is binding until that is confirmed by the appellate court. Even when the appellate court confirms it, we do not know for sure, since a future court might interpret the holding in the first case in its own way, and so on. There is no particular day in which the law becomes set in stone – judge-made law is always to some degree inchoate. Statute, then, is a law-production technology in which a single group of persons promulgates a law at a discrete point in time. Under precedent, several groups promulgate a law at different points in time.

Far be it from me to suggest that these are the only differences – remuneration, legitimacy, and partisanship all immediately spring to mind. Nor can I realistically claim that law promulgation and law production as processes are identical or concurrent. I say only that statutes which come into force today were not in force yesterday. This does not mean that they were made overnight. A statute might take centuries to produce, a point readily attested by the history of European civil codes. It would not be realistic to claim that Roman law was reinvented by the makers of the Code Napoléon or the *Bürgerliches Gesetzbuch*. It was incorporated partly and at a cost much lower than that of drafting new laws from scratch. Likewise, it is a very safe bet that the mass of judgments which the courts deliver today does not differ perceptibly from the mass of judgments which they delivered yesterday. This does not mean that the courts gather information and convert it into law at a constant rate. A large body of information may be accumulated in a single dispute. That information may then account for nine-tenths, or more, of some legal revolution. The definitions advanced at the start of this section do not account for these input mechanisms. They do, however, account for the structure of the output. There is a precise day on which statutes come into force and the persons who make them come into force can always be identified. There is no precise day on which judge-made law changes and it is impossible to identify all the persons who can and do change it.

Temporal and institutional dispersal, though not fully determinative of information accumulation and law production, structure those processes in important ways. Firstly, different degrees of centralisation have implications for the ‘proximity’ of information.

Secondly, the diffusion of lawmaking over time impinges on legal certainty. That the courts do not promulgate laws at discrete points in time means that they can fine-tune their output to very particular circumstances, but also that the laws that they promulgate are always in hierarchical flux. The legislature's output, conversely, is oftentimes less specific but more structured.

IV. Method

I have deliberately kept the foregoing vague – the exact nature of the differences between the two law-production technologies is what occupies me in the rest of this work. I hope what I said is nonetheless sufficient to understand my work's broader structure. I now want to say a few words about method. I draw extensively on two scholastic traditions. One is law-and-economics, the other legal theory, or what the British usually call jurisprudence.

From rational choice theory, I have taken the assumption that actors act rationally to maximise their utility. That is unrealistic, but necessary. My conjectures are always contingent on predictions about the behaviour of judges, litigants, legislators, and members of the general public under some set of constraints. Without some assumption about what it is that they maximise and how it is that they go about maximising it, it would be impossible to make any grounded predictions. Naturally, I cannot realistically claim that all persons always act rationally, or that they never have altruistic motivations. I only claim rationality and selfishness to be pervasive enough to explain trends in the production of law. If the reader disagrees with this, she will probably also disagree with many of my more specific points. But I do not think that the assumption is so heroic as to warrant instant dismissal.

My evaluative premises are also economic, though I believe less controversial. I assume two things: that cost-effectiveness is desirable and that uncertainty is undesirable. The former stands for the standard proposition that more is better than less. If the information needed to produce some law costs less under one technology than under another, then (*ceteris paribus*) the 'cheaper' technology ought to be favoured. In respect of the latter, I already mentioned that uncertainty deters desirable activities and encourages undesirable ones. If investments in information result in uncertainty cost savings and if those investments are smaller than the savings, then they are (again, *ceteris paribus*), efficient.

I do not, however, concern myself here with allocative efficiency. I say quite a lot about the certainty and information costs of laws that parliaments and courts produce. However, I say nothing about the propensities of those institutions to direct resources to good uses. In my framework, a law which induces the public to behave wastefully is perfectly acceptable, provided that it is certain and that the information used to make it is acquired cost-effectively. There are technical reasons for my omission of allocative efficiency, which I will explain in Chapter 2. There is also an incidental benefit - my framework is transposable to non-economic modes of legal analysis. What I say here is valid not only if one wishes the law to be efficient, but also if one's priority is that it be fair, or just, or communitarian, or liberal, or something else. I merely seek to determine how two ends, that of certainty and informational economy, are best attained. The two are seldom, if ever, in tension with others.

I now turn to legal theory. I said before that I assume selfishness and rationality to make predictions about behaviour under certain constraints. The assumption is from economics. The constraints, on the other hand, are sourced from legal theory. For example, I define a law among positivist lines. It is from that school that I also extricated the concept of a higher-order law which determines the hierarchy between ordinary laws, or a metalaw.

Legal theory and law-and-economics are uneasy bedfellows. Most legal theorists have little time for modern law-and-economics and its formal sophistication. And most law-and-economics scholars think at a level of specificity which lays at some remove from that of legal theory. I nonetheless think the two are usefully combined here. The application of the economic method to problems of jurisprudence yields some counter-intuitive results. And legal theory allows me to introduce a level of definitional complexity which is very often lost in modern works of law-and-economics. Those tend to focus on specific measures and their impact, to the exclusion of more general problems such as that of legal structure. Specifically, I speak of a problem here which I call hierarchic uncertainty – the situation in which two laws point to different outcomes on the same facts. It is undetectable when one is discussing the effect of a single law, which is more often than not the case in modern law-and-economics.

Lastly, I have sought at all points to provide worked examples of my theoretical points. Those examples concern real-world legal doctrines, usually with a strong focus on their historical development. I have focused on three legal systems, those of England, Germany, and France. I have done this partly to ensure that my examples are to some extent representative – the three countries correspond to the three major Western legal families. There is also a practical reason, in that I received my legal education in England and German and French law are reasonably well-covered in the anglophone literature, whereas many other legal systems are not. There are undeniably flaws in picking examples in this fashion. But it should be born in mind that those examples are not meant as ‘proofs’ of my theories’ general applicability, or anything to that effect. So far as I do not claim empirical validity, I hope that any biases inherent in my choice of examples do not affect their usefulness.

V. Relevance

I am, alas, not the first to reckon of the difference between precedent and statute. There is in fact a voluminous body of literature on the subject, to which the instant composition adds at most a pebble. Those conversant with the literature would no doubt welcome a summary of my proposed improvements. I will now set them out, hollowed, for now, of technicalities and qualifications.

I say that precedent is good for some laws, and statute for others. This is nowadays an unorthodox proposition. Ever since the seventies, it has been argued, forcefully and persistently, that the common law is prone to efficiency and the civil law to inefficiency. And much of this is tied to the common law’s use of precedent and the civilian preference for statutes. The argument, condensed, runs thus: law production may be conceptualised as a market. In that market, the public demands regulation and the state supplies it. The courts, being decentralised, are more like a competitive market than the legislature. Therefore, it is better to have laws produced by the courts than by the

legislature. The laws that end up being produced are more like the laws that would be produced under a perfectly competitive market for regulation. Since in the common law precedent is binding and in the civil law it is not, orthodoxy posits that the common law is efficient.

It is at that point that I take aim in all eight essays. Statute, I argue, is in many instances better than precedent. Firstly, to make a law we sometimes need to produce new information. For example, to regulate fracking we need to know its likely impact. That is the kind of information which none of us presently hold. If the courts had to regulate precedent, nobody would produce it. The amount at stake for any individual in the resolution of a case is likely to be much lower than the social benefit of fracking regulation, and no litigant can capture the benefit of the courts making a fracking law that applies to everyone. Any fracking law that the courts make, then, is likely to reflect imperfect information. The legislature, conversely, has the budgetary means to initiate the production of new information – it may commission a study into the outcomes of fracking, and then use that information to legislate accordingly. Fracking, of course, is just one of many possible examples – the point extends to any situation in which new information has to be generated purely for the purpose of making law. In all those instances, statute comes out superior to precedent.

Secondly, it is often said in the literature that precedent is better because it is more certain. As more and more cases are decided under some law, that law becomes more precise. That view is as old as Holmes. I challenge it, partly, here. It is true that as more cases are decided, a *single* law may become clearer. The general standard of negligence may be transformed into micro-laws on the duty and standard of care, remoteness, and harm. We know today what negligence is much better than we did on the day after *Donoghue* was decided. This logic, true as it may be, obscures another, which I think is equally true. The micro-laws which the courts make often overlap. In England, there is often uncertainty as to whether a certain act should be measured against the standard of care or against the remoteness rule, or whether the defendant is arguing that the claimant suffered no harm or that he owed him no duty of care. That is a different type of uncertainty, one which I call here hierarchic. Hierarchic uncertainty is a function of the number of laws: the more laws we have, the likelier it is that on some set of facts those laws will overlap. Under precedent, the probability that a new law will be produced is positive in every instance of litigation. Consequently, with the passage of time it becomes inevitable that a precedent-based system will have more numerous laws than a statutory one. For every additional law, the probability of overlap increases. Therefore, the higher the number of laws, the more overlap there will be within the system as a whole. Since precedent-based systems have more laws, there is more overlap, and they are therefore more hierarchically uncertain. This is an advantage of statute over precedent, and one which orthodoxy overlooks.

VI. Structure

With these preliminary points in mind, I now move to provide a brief summary of each essay. The next chapter carries the customary literature view. There are, broadly speaking, three strands of literature that are relevant to this work. The first is what I

called the 'efficiency of the common law' hypothesis – that is the literature which argues that precedent has an innate tendency to efficiency. The second field which I overview is what law-and-economics scholars call rules-versus-standards. It analyses the optimal specificity of laws. Lastly, I synthesise the literature, most of which Austrian, that argues that the courts are more cost-effective acquirers of information. I conclude by isolating some gaps and by explaining, at a somewhat more technical level than I did here, why and how I propose to fill them.

In Chapter 3, I distinguish between two types of uncertainty. I explain how uncertainty might manifest, and I depart from the juridico-economic orthodoxy. Specifically, I argue that, along with 'normal' uncertainty which stems from vagueness, there is also hierarchic uncertainty. The latter is caused by laws overlapping over particular sets of facts. I also introduce the idea that there is a trade-off between applicative and hierarchic uncertainty, so that a gain in one is matched by a loss in the other.

Chapters 4, 5, and 6 discuss applicative certainty. If we are given a standard, such as 'behave reasonably', then it is difficult to tell what that means in specific cases, such as when a doctor administers an electroshock without first administering muscle relaxant. The literature, as we will see in Chapter 2, argues that precedent converts vague laws, which are there called standards, into specific ones, which the literature calls rules. I argue that there is a special case in which precedent simply converts a standard into another standard. Critical to this is the distinction between fact and law, which I introduce in Chapter 4. Information always comes at a cost to the lawmaker. Sometimes, that cost is prohibitive. We would all agree that a law which sets out the chemical composition of all medicines that may benefit humans in the future would be beneficial. However, we cannot acquire the necessary information right away. In such cases, a crystal-clear law simply cannot be produced. Vague criteria must do. At other times, the cost is not prohibitive but the gains from enacting a clearer law are smaller than the cost of the information necessary to produce them. A regulation which sets the optimal balance between the interests of bonfire fanatics and the pathologically pyrophobic would benefit both groups. Such a regulation would likely contain, to name but a few, an exhaustive description of the times when bonfires are permitted and of the places where they may be staged, context-sensitive upper and lower bounds on their size and luminosity, a close-ended list of the materials which may lawfully be thrown into bonfires, educational and vocational requirements for bonfire organisers, superintendents, and spectators, sanctions tailed to the severity of each bonfire-law infraction, and so on. To acquire all the necessary information would be very costly. At the same time, for most people, most of the time, bonfires induce neither dread nor ecstasy. Therefore, the cost of drafting a crystal-clear bonfire regulation would exceed the gains that would accrue to society from its promulgation. To invest in it would be wasteful. A vaguer law, such as the negligence standard, is better. These two considerations - that the cost of information is sometimes prohibitive and sometimes excessive vis-à-vis the gains from legal precision - mean that any legal system, no matter how perfect, must contain some laws that are vague. That vagueness, in turn, makes it inevitable that some elements of the adjudication process must be left to the discretion of the judge. A system which combines discretionary and non-discretionary justice must distinguish between fact and law. That distinction is in

epistemology unsound, and it gives rise to a taxonomical lacuna. Some elements of adjudication must be classified as either both or neither.

Chapter 5 takes this point further. I argue that this lacuna is bound, over time, to be filled with exceptions and qualifications to a standard. Those exceptions might be factual, in which case they bind no future judge, or they might be legal, in which case they do. Their true position on the fact-law spectrum is unknowable. That opacity incentivises judges to produce more and more such 'mixed' holdings, eventually causing the law to mean all things and none. It becomes necessary to change the standard, purely to eliminate the uncertainty from 'mixed' holdings. A gain in certainty is attained by replacing an amortised standard with an unamortised one – but there is nothing to say that the unamortised standard as such is more specific than the one which it comes to replace.

Chapter 6 is an illustration to Chapters 4 and 5. The rule in *Hadley v Baxendale* states that in contract only losses which are 'in the reasonable contemplation' of the parties when they contract can be recovered in a subsequent suit for breach. Deciding what is 'in the reasonable contemplation' of the parties is a 'mixed' question – it is partly legal and partly factual. By the time *The Heron II* was decided, it had been interpreted to mean so many things that it was impossible to predict which way a case would go. In *The Achilles*, the House of Lords changed the standard - instead of 'reasonable contemplation', there is now a test of 'tacit assumption of risk'. Their Lordships, if I am correct, changed the law to remove the uncertainty inherent in the old formulation of the test. Certainly, there is no reason to think that the phrase 'tacit assumption of risk' is any less vague than 'reasonable contemplation'.

In Chapter 7, I discuss hierarchic uncertainty. It is solved through metalaws – higher-order laws which do not contain conditions in which the state will deploy its power to coerce, but which instead mandate an order of precedence between other, 'ordinary' laws. Common examples include the metalaw that no statute may contravene the constitution, that specific laws oust general ones, and that if there is tension between two judge-made laws, the more recent prevails. I move to show that hierarchic certainty depends on the vagueness with which metalaws are expressed. In this respect, statute has a systematic advantage. Since under statute the content of ordinary laws is decided at a discrete point in time, it becomes possible to mandate a hierarchy between them at that time too. Precedent, conversely, is fluid – laws are generated by different actors at different times. The hierarchy of the laws must always be to some extent indeterminate. This runs against the efficiency of the common law hypothesis. It also has an interesting practical implication – even if precedent has advantages in incipient areas of law, with time there is likely to come a point at which codifying becomes preferable.

In Chapter 8, I discuss the cost of information under precedent and statute. I show that the courts are better for what I call brute-fact information – that is, information about the current state of the world. The legislature enjoys an advantage when it comes to contingent facts – predictions about the likely state of the world under some law which is in contemplation, such as the fracking regulation from the preceding section. Statute is also superior for purposes – it is cheaper for the legislature as a collective to determine whether it prefers one state of the world to another than it is for the judiciary. I then move

to discuss certain complications and refinements – the role of time, uncertainty, as well as interest groups. The assumption of benevolent parliaments and unbiased courts is relaxed. Perhaps counter-intuitively, this does not substantially affect the conclusions of the analysis. I conclude that chapter by expanding on some ramifications about real-world policy, among which the comparison between the common and the civil law, attempts to curb the rate of litigation, and the role of Attorney Generals and *amici curiae* in those states which have them.

Chapter 9 compares the role of precedent in the civil and the common law. I show, or more precisely affirm, that the difference is one of degree – in the common law, precedent plays a greater role than it does in the civil law. But this does not mean that in the civil law judges do not follow one another. I then move to compare the structure of precedent in four countries – France, Germany, Italy, and England, and I draw some inferences. The choices made in France and Italy reflect a desire to minimise hierarchic uncertainty. Accordingly, applicative uncertainty is high. In England and Germany, the law is more hierarchically uncertain but more applicatively certain. Moreover, as between the latter pair, Germany has an advantage in cost-effectiveness terms: German judges very rarely choose purposes, whereas English ones often do. Accordingly, there is no reason to think that Italian or French law is worse than English law – the Franco-Italian design simply reflects a choice of a different kind of uncertainty. And where the trade-off between the two kinds of uncertainty is struck similarly, the civilian system enjoys an advantage.

The last chapter, as is their wont, concludes.

Chapter II

LITERATURE REVIEW

Prudence and convention alike dictate that I should begin with a summary of the literature to which I hope to add. I divide the relevant scholarship into three rubrics: the efficiency of the common law hypothesis, the literature on rules-versus-standards, and the theory of information in regulation. For each, I will first summarise the leading contributions. Then I will isolate some trends. Once the current state of knowledge is thus described, I will try to explain how I propose to advance it.

I. The Efficiency of the Common Law Hypothesis

The efficiency of the common law hypothesis, put briefly, posits that the common law tends to efficiency. This is not altogether novel.¹ The ascendancy of the economic approach to law merely made that claim easier to substantiate. The modern analytical scheme is this: there are individuals who desire, that is, demand, certain legal rules, and there are others still who are in a position to supply them. If it were expedient for the two to meet in a market, that market would equilibrate at a set of efficient legal provisions. Such bargaining is alas impossible in our world of positive transaction costs. For this reason, supply and demand instead concentrate in an institution, a court or a legislature depending on the choice of law production technology. Efficiency is measured by isolating those features of precedent and statute that render them analogous (or dissimilar) to free exchange. The relative desirability of the two mechanisms then depends on the extent to which each mimics a perfectly competitive environment.²

From a jurisprudential perspective, this approach coheres loosely with the realist tradition. The basic premise is that actors interact strategically with a system, the content of the interaction determined by personal preferences and institutional constraints.³ A full analytical depiction of the courts in this mould would necessarily involve elements that are, among others, political ('courts can compel a person to appear before it through the use of force'), behavioural ('the defendant speaks last'), and semiological ('barristers wear wigs'). To take all such elements together would be to render the matter intractable. Neoclassical theory allows the analyst to restrict the prescient elements to those which the theory predicts will exert an influence on the lawmaker's choice of strategic behaviour. This is only a partial solution to the analytical problem, so far as the full set of constraints remains very large. The literature shows that the relevant choice sets are structured by factors as diverse as the judge appraisal system, the structure of the market for litigation services, the availability of contingency fees, the cost-allocation rule, the frequency with which the litigant participates in legal proceedings, the availability of class actions, the reputational cost of reversing precedent, the amount of justification that

¹ See the speech of Lord Mansfield in *Omychund v Barker* (1744) 26 ER 15. The idea is mirrored in some of the foundational works in economic science, e.g. Hayek, F., *Law, Legislation and Liberty: Rules and Order* (1978 CUP); Smith, A., *An Inquiry into the Nature and Causes of the Wealth of Nations* (1776 EC) 588.

² Landes, W. & Posner, R., 'Adjudication as a Private Good' (1980) 8 JLS 235

³ The essence of the approach is described in Kennedy, D., 'A Left Phenomenological Alternative to The Hart/Kelsen Theory of Legal Interpretation' in *Legal Reasoning, Collected Essays* (Aurora 2008) 158-161.

must be provided with any one judgement, and countless others. To complicate matters further, the application of the same economic reasoning to two sets of constraints, howsoever identified, may yield incentives that point in opposite directions, with no empirical or theoretical measure of their relative strength. For this reason, the studies that I will shortly summarise deal with small selections of institutional variables. Because of this, their conclusions are often conditional on stringent assumptions. To my knowledge, no modeller has proffered categorical proof of the efficiency hypothesis, whose popularity and acceptance are instead a result of the volume of contestable theoretical and empirical research that support it.⁴

1. Demand-side Models

One approach to the problem is to look at the demand-side of the market for legal rules, that is, at the expected behaviour of litigants and its relationship to the substantive rules that are adopted.⁵ Judges are assumed to change a rule with some probability in every instance of litigation.⁶ There are, very broadly speaking, two institutional facets of courts that are commonly considered in the literature.⁷ Firstly, under *stare decisis*, substantive laws can only be amended if they are litigated. Any prediction about the type and nature of cases that are likely to be brought translates into a prediction about the type and nature of the rules that will be adopted. Secondly, strategic interaction involves the manipulation of legal materials, which in turn is a question of effort and skill.⁸ The likelihood that this manipulation will be successful is generally perceived as a function of legal representation expenditure. It may therefore be assumed that the more a party spends on representation, the more likely she is to win. The ratio between the stakes for either party can be used as a useful predictor of the probability of winning, and the probability of winning can be linked to the likelihood of legal change.⁹

⁴ See for example the qualifications in Roe, M., 'Chaos and Evolution in Law and Economics' (1996) 109 Harvard LR 641, 667 or the remarks in Crew, M. & Twright, C., 'On the Efficiency of Public Law: A Public Choice Perspective' (1990) 66 PC 15, 27

⁵ The distinction originates from Zywicki, T., 'The Rise and Fall of Efficiency in the Common Law' (2003) NWULR 1551

⁶ This is of course highly unrealistic, but it need not detract from the utility of analysis. The arguments here are consequential, that is, they attempt to prove that efficiency obtains in common law system through a mechanism similar to Adam Smith's 'invisible hand'. If the hypothetical judge in the model is assumed to act in order to fulfil some policy goal, such as efficiency or fairness, then the essence the argument changes. For a comprehensive discussion of this issue, see Vermeulen, A., *Law and the Limits of Reason* (2008 OUP).

⁷ Kornhauser, A., 'A Guide to the Perplexed Claims of Efficiency in the Law' (1980) 8 Hofstra LR 591, 629 proposes a similar classification. I have omitted Kornhauser's fourth factor, the decision-making of the judiciary, since in the intervening period a body of literature that requires separate examination has developed on the point.

⁸ Kennedy (n 3)

⁹ In the present paper, I consider the efficiency claim as it relates to substantive legal rules. The conjecture that the chance of winning is a function of litigation expenditure has considerable implications for the administrative efficiency of the common law. Tullock, G., *The Case against The Common Law* (CAP 1997) and Tullock, G., 'Technology: The Anglo-Saxons versus the Rest of the World' in Rowley, K. (ed), *The Selected Works of Gordon Tullock* (LF 2005) advance the argument that the common law is administratively inefficient because its adversarial procedure incents the parties to dissipate funds. The mechanism is generally driven by one party's attempt to obfuscate the truth. The inquisitorial system is not blighted by such inefficiencies because the discovery of facts and the related expenditure is controlled by the judge, who faces no incentive to dissipate. It is thought clear that acceptance of this hypothesis need not imply that the controlling substantive rules of the common law are inefficient, or vice versa.

Professor Priest, in his seminal article on the subject¹⁰, advances what is perhaps the most ambitious exposition of the demand-side hypothesis. In his view, inefficient rules to some extent influence settlement-litigation decisions. This is so because an inefficient rule entails higher transaction costs than one which is efficient.¹¹ Whenever an inefficient rule governs, the costs that the parties face are greater than they would be if the rule were efficient. That the costs are higher means, in Professor Priest's view, that the parties' stakes are higher. He then posits that higher stakes entail a higher likelihood of litigation vis-à-vis settlement.¹² Consequently, an inefficient rule, which entails higher costs and accordingly higher stakes, is more likely to be litigated than an efficient one. Since a rule can only be changed if it is litigated, efficient rules are more likely to remain unchanged than inefficient ones. This higher chance of survival translates, across the system, into a tendency to efficient substantive rules.¹³

In a contemporaneous publication¹⁴, Professor Rubin proffers a slightly less ambitious version of the hypothesis. In his view, precedential efficiency depends on the nature of the parties' interest in the outcome of cases. He differentiates between two types of litigants. One-off litigants are only concerned with the immediate outcome of a case. Repeat litigants care about the long-term impact of a rule. One-off litigants are indifferent as between efficient and inefficient rules, whereby repeat litigants prefer some rules over others. As a result, the latter are likely to invest in moving the law in their desired direction. Provided that repeat litigants can be expected to appear as both¹⁵ claimants and defendants in a dispute, the law is likely to tend to efficiency. A necessary corollary is that where a repeat litigant faces a non-repeat litigant often, as is the case in, say, nuisance or product liability cases¹⁶, the law is likely to be biased in favour of repeat litigants.¹⁷

¹⁰ Priest, G., 'The Common Law Process and the Selection of Efficient Rules' (1977) 6 JLS 65

¹¹ This follows from Coase, R., 'The Problem of Social Cost' (1960) 3 JLE 1

¹² This might seem controversial, since it often makes sense for a risk-averse party to settle if stakes are high. Professor Priest founds his assumption on Landes, W., 'An Economic Analysis of the Courts' (1971) 14 JLE 61; Posner, R., 'An Economic Approach to Legal Procedure and Judicial Administration' (1973) 2 JLS 399, which are cited by Professor Priest at n 8. That argument was subsequently developed into a well-known contribution to that literature: Priest, G. & Klein, B., 'The Selection of Disputes for Litigation' (1984) 13 JLS 1.

¹³ Terrebone, P., 'A Strictly Evolutionary Model of Common Law' (1981) 10 JLS 397 reaches the same conclusion on largely the same grounds by using an evolutionary model. Note further that in this model, precedent is likely to converge toward efficiency even if a very large proportion of the judiciary are openly opposed to efficiency as a policy objective: Priest (n 10) 69-70

¹⁴ Rubin, P., 'Why is the Common Law Efficient?' (1977) 6 JLS 51

¹⁵ In a subsequent article, Professor Rubin further identified areas of law such as contract, in which the parties do not know *ex ante* whether they will be plaintiffs or defendants, as more likely to exhibit these properties: Rubin, P., 'Common Law and Statute Law' (1982) 11 JLS 205.

¹⁶ *Ibid* 56

¹⁷ The reader might validly ponder whether the presence of legal counsel does not transform all litigation into a repeat interaction – if a single lawyer represents many one-off litigants, then they may be aggregated, for the purposes of the model, into a single 'repeat' litigant. Professor Rubin examined this point in Rubin, P. & Bailey, M., 'The Role of Lawyers in Changing the Law' (1994) 23 JLS 807. He concludes that lawyers are going to seek rents for their own benefits, which leads to distortions: the law is likely to favour damages over injunctions, and is likely to become less certain with time. For alternative approaches to the same problem, see White, M., 'Legal

Professor Goodman arrives at an analogous hypothesis by considering litigation investments instead of dispute selection.¹⁸ In his model, parties' investment into the litigation process increases their chances of success. The party that has a higher stake in the proceedings is therefore likely to invest more, and on the whole to win more often. Supposing that both parties are representative of the market, the private benefits of the party with the higher economic stake are likely to coincide with the social. As a result, an efficient rule is likely to be adopted whenever the economic stakes of the litigants are symmetric. In a departure from the previous two models, the rate (but not the direction) of convergence is, in this model, affected by judicial bias.¹⁹ The requirement that both parties be 'representative', however, corresponds roughly to the assumptions in Professor Rubin's analysis.²⁰

Professors Cooter and Kornhauser offer a less optimistic version of the efficiency hypothesis.²¹ They model judicial choice as a Markov process:²² the selection of a new rule is independent of the judge's personal preferences.²³ The authors conclude that, if there are no factors affecting the litigants' settlement-litigation calculus or their investment in litigation, there is no reason to suppose that the common law will be either efficient or inefficient: both kinds of rule are likely to recur through time.²⁴ Conversely, if all rules are litigated with a positive probability but the best rule is never litigated, efficiency is guaranteed to obtain without judicial input.²⁵ Between these two extremes, the formal model shows that if inefficient laws are litigated more frequently (as in the Priest model²⁶) or if more is invested in changing inefficient laws (as in the Rubin version²⁷), then efficient rules will obtain with a higher frequency than inefficient ones.²⁸

The conceptual representation of the actual rule of *stare decisis* in the foregoing papers is somewhat simplistic: it is assumed that, in any instance of litigation, a rule is likely to stand or fall with a constant probability. Professor Landes and Judge Posner refine the model. They assume that the affirmation of a rule in a case results in its entrenchment.²⁹ The introduction of this assumption weakens the efficiency hypothesis: a repeat litigant

Complexity and Lawyers' Benefit from Litigation' (1992) 12 IRLE 381 and Dari-Mattiacci, G. & Deffains, B., 'Uncertainty of Law and the Legal Process' (2007) 163 JITE 627. On the market for legal services generally, see Hadfield, G., 'The Price of Law: How the Market for Justice Distorts the Justice System' (2000) 98 Michigan LR 953.

¹⁸ Goodman, J., 'An Economic Theory of the Evolution of the Common Law' (1978) 7 JLS 393

¹⁹ Ibid 398-9

²⁰ Ibid 405. Professor Goodman's model is also consonant with the analysis in Katz, A., 'Judicial Decisionmaking and Litigation Expenditure' (1988) 8 IRLE 127 which, in the context of the game theoretic analysis of litigation, finds that repeat litigants are likely to invest more than one-off litigants and that this increases their probability of success.

²¹ Cooter, R. & Kornhauser, L., 'Can Litigation Improve the Law without the Help of Judges' (1980) 9 JLS 139

²² The authors provide an accessible explanation at n 4 infra.

²³ Ibid 143

²⁴ Ibid 144

²⁵ Ibid 145

²⁶ Priest (n 10)

²⁷ Rubin (n 14)

²⁸ Cooter & Kornhauser (n 21) 157

²⁹ Landes & Posner (n 2)

will, whenever he perceives defeat as likely, choose to settle to avoid further entrenchment. This need not undermine the hypothesis too much, however. Inefficient legal rules will not be the subject of much litigation. The precedential value of holdings depreciates with time, so that there always exists a point at which the reversal of an inefficient incumbent becomes possible.³⁰

Professor Rubin's second contribution to this literature³¹ argues that the common law produced efficient rules in the nineteenth century and also that the ascendancy of statute in the twentieth century resulted in inefficiency. The explanation, to Professor Rubin, lies in technological change. In the nineteenth century, litigants were dispersed. In the twentieth, improved communication and intensified urbanisation made it possible for litigant groups to form.³² As a result, the modern courts are as amenable to 'capture' as legislatures.³³ Efficient laws will only be adopted when transaction costs are zero or low, since under these conditions all interest groups can organise and bargain their way to a Paretan solution.³⁴ In our world of positive transaction costs, however, there is no reason to suppose that there is a universal tendency for judge-made law to be more efficient than statute. The matter turns on the organisation cost (a)symmetry between affected interest groups.³⁵

This line of analysis was developed further by Professors Crew and Twight.³⁶ They conclude that while neither precedent nor statute may be expected to consistently produce efficient rules, the common law is less inefficient than statute. Their comparison builds on each law production technology's vulnerability to transaction cost augmentation, that is, a mechanism through which one party can institute a change that increases the cost of organization for other affected groups.³⁷ The common law, they say,

³⁰ Ibid 272-3. The Landes-Posner model too rests on the assumption of large, symmetrical, and normative stakes. It may be said to restrict the efficiency hypothesis; scope of application to a limited selection of legal rubrics. (ibid 284). The authors also point out that if their model is combined with Priest's assumption that inefficient rules generate larger stakes, then it ineluctably follows that the law would tend to entrench those rules. (281-3) This idea is developed into an inefficiency hypothesis in Parsons, W., 'The Inefficient Common Law' (1983) 92 Yale LJ 863

³¹ Rubin (n 15)

³² Ibid 218. More generally, the importance of demand-side concentration and organization was initially highlighted in Hirshleifer, A., 'Evolutionary Models in Economics and Law: Cooperation versus Conflict Strategies' (1980) UCLA Working Paper 170, 81-3.

³³ Ibid 222

³⁴ Ibid 222

³⁵ Ibid 219. Professor Rubin further refers to Arrow, K. & Hahn, F., *General Competitive Analysis* (1971 OBP) 186 for this proposition.

³⁶ Crew & Twight (n 4). Since their theory is based on what is often called public choice theory, I should note that one of the foremost articles on the public-choice analysis of the courts is Landes, W. & Posner, R., 'The Independent Judiciary in a Public Choice Perspective' (1975) 18 JLE 875. I do not discuss that paper at length since it does not in itself concern the efficiency of the common law. The focus, instead, is on the interaction between the judiciary and the legislature. Specifically, Professor Landes and Judge Posner inquire whether an independent judiciary mollifies the legislature's tendency to pass laws that favour special interests. (See further Buchanan, J., 'The Independent Judiciary in an Interest-Group Perspective: A Comment' (1975) 18 JLE 903.) They were, however, perhaps the first to point out that the fact that judges have life tenure means that they cannot be 'captured' in the way the legislature can. They do not need campaign funds and endorsements. (Posner & Landes 876, 891ff).

³⁷ Ibid 25

is superior for two reasons. Firstly, to a private citizen, the costs of challenging a law in the courts, high as they may be, are lower than those of convincing a legislative body to repeal a statute.³⁸ That argument the authors base on the idea that while the legislature can refuse to consider petitions from private individuals, the courts cannot. Secondly, vested interests may be discouraged from engaging in transaction cost augmentation if they do not know whether they will be pursuing or defending claims under the new law.³⁹ Since the drafting of laws targeted at a specific class of persons is more common under statute than it is under precedent, common law rules are more likely to be uncertain in this fashion.⁴⁰ For this reason, the authors express tentative support for the proposition that precedent is more likely to produce efficient substantive rules.⁴¹

The public-choice implications of the efficiency of common law hypothesis were also examined by Professors Glaeser and Shleifer.⁴² Their model is structured around the state's administrative capacity and on the ability of private actors to subvert justice.⁴³ The latter term incorporates both conventional regulatory capture and the strategic generation of judicial biases. The authors posit that if the state's administrative capacity is low and private parties' ability to subvert justice high, neither statute nor precedent are likely to produce efficiency gains. In fact, doing nothing is optimal. It enables the state to economise on the cost of promulgating and enforcing laws whose subversion is inevitable.⁴⁴ If administrative capacity is intermediate, regulation has an advantage. Firstly, it might be that it is costlier for big business to capture regulators than it is to influence judges.⁴⁵ Secondly, since litigation entails high payouts with small probabilities, business has a stronger incentive to capture the judiciary than to capture regulators.⁴⁶ Thus under a litigation-heavy enforcement regime, business can, among others, ensure that its cases always reach the highest courts, that it benefits from the best representation, and that pressure is exerted on judges to deliver judgments in its favour. For this reason, regulation is a more cost-effective way of countervailing concentrated economic power. Finally, if administrative capacity is high, precedent comes out superior. The authors say that this is so because, without subversion, litigation achieves the first-best solution, whereas regulation does not.⁴⁷ The argument has implications for both the historical analysis of the common law and for its modern use. In the premodern period, the common law reigned supreme. The Industrial Revolution saw a rapid accumulation and concentration of capital. Those processes were not immediately matched by improvements in administrative capacity. Accordingly, private actors could subvert justice through the courts cheaply. This prompted a shift to regulation and statute. As the state's administrative capacity improved over the course of the twentieth century, litigation again became efficient, prompting deregulation. In our day, the authors say, the

³⁸ Ibid

³⁹ Ibid 26. The idea originates from Buchanan, M. & Tullock, G., *The Calculus of Consent* (1962 AA).

⁴⁰ A similar argument is made in Oman, N., 'A Pragmatic Defense of Contract Law' (2009) 98 *Georgetown LJ* 77.

⁴¹ Crew & Twight (n 4) 32-3

⁴² Glaeser, L. & Shleifer, A., 'The Rise of the Regulatory State' (2003) 41 *JEL* 401

⁴³ Ibid 413-4

⁴⁴ Ibid 420

⁴⁵ Landis, J., *The Administrative Process* (YUP 1938)

⁴⁶ Glaeser & Schleifer (n 42) 402

⁴⁷ Ibid 421

choice between statute and precedent turns on the same considerations. In developing and transitional economies, where the state is weak, doing nothing is the optimal solution. As administrative capacity improves, regulation and statute become more attractive, but they still do not produce first-best outcomes. In advanced economies, conversely, precedent ought to be favoured.⁴⁸

The literature that I have synthesised so far attempts to identify an evolutionary force within the common law that renders it efficient irrespective of the behaviour of those who are tasked with the actual selection of rules. Appealing as the argument may be, it places a very high probative burden on its proponents. The strong-form version of the hypothesis, that espoused in the earlier writings of Professors Priest⁴⁹ and Goodman⁵⁰, only holds if the set of institutional features under consideration is kept tightly circumscribed. The more recent expositions of the demand-side hypothesis tend to make two qualifications. Firstly, judge-made rules are not inevitably efficient. The argument is merely that, all things being equal, precedent will yield more efficient rules than statute. Secondly, the claim to efficiency does not apply across the full gamut of legal rubrics: instead, it is confined to some specific areas which are for some reason immune from mischiefs that affect others.⁵¹

2. Supply-side Models

An alternative approach is to abstract from litigant behaviour and to found the analysis on judicial preferences. Legal change is assumed to be a purposive process.⁵² Since judges have diverse preferences, they manipulate legal materials so as to shift the system toward the state that they prefer. The institutional structure of the courts determines the available conduits of change, and, provided that each judge acts as a rational⁵³ maximiser, this enables the analyst to make prognoses about the properties of the rules that the process will produce. There are, generally speaking, three institutional features that are examined in these models. Firstly, it is frequently, and doubtless correctly, assumed that deviation from precedent entails some cost to the judge, and further that the cost of deviating is higher than the cost of applying the existing rule.⁵⁴ Secondly, many of the authors discuss at length the likely motivations the judges. Those are said to include, among others, a desire to reduce one's caseload, to be promoted, and to avoid appellate reversal.

⁴⁸ Ibid 422

⁴⁹ Priest (n 10)

⁵⁰ Goodman (n 18)

⁵¹ It must be noted now, for reasons which will become apparent later, that all such qualifications normally identify contract law as one area in which the hypothesis is likely to hold. E.g. Rubin (n 15) 214; Crew and Tight (n 4) 25; Landes & Posner (n 2) 275-280

⁵² The argument, as Judge Posner puts it, is that judges have a 'taste' for efficiency: Posner, R., *Economic Analysis of Law* (Aspen 1988) 569.

⁵³ The assumption of judicial rationality is relaxed in Jois, G., 'Stare Decisis is Cognitive Error' (2009) 75 Brooklyn LR 63.

⁵⁴ See Kennedy (n 3)

The indefatigable Judge Posner proffered the first integrated⁵⁵ model of judicial self-maximising behaviour.⁵⁶ His judicial utility function comprises diverse elements, among which leisure, income, and reputation.⁵⁷ As far as the efficiency hypothesis is concerned, his argument is that the incentives faced by the judge impel him to reveal his policy preferences without, however, formulating his opinion as an expression of personal ideology. Since efficiency is a common value for all judges, expressing a preference for it is not as costly as expressing a preference for some other social objective.⁵⁸ Efficiency is therefore likely to be cited whenever a dispute requires the judiciary to formulate a novel legal rule. After that law is promulgated, leisure-maximisation dictates that judges will not deviate from the efficient law because doing so would be labour-intensive.

In Professor Zywicki's view⁵⁹, there is a specific set of institutional conditions under which precedent leads to efficiency. Those conditions, he says, obtained in pre-modern England. Professor Zywicki points to concurrent jurisdiction and by-the-case emolument.⁶⁰ Plaintiffs had a choice between jurisdictions. Since judges were dependent for their livelihood on their courts' ability to attract litigants, there was competition between those jurisdictions. This would not, by itself, ensure efficient rules: one would expect the resultant system to exhibit a considerable pro-plaintiff bias.⁶¹ Professor Zywicki believes that an auxiliary demand-side effect of the type identified by Professors Crew and Twight⁶² was at play. In the specialised courts that dealt with mercantile and ecclesiastical matters, parties could not predict whether they would be plaintiffs or defendants. For this reason, they had no cause to bias the law in either direction.⁶³ The pro-plaintiff tendency, further, was weakened by the laxitude of *stare decisis* in the pre-modern period. The strength of a litigant's incentive to invest in favourable precedent is dependent on the probability that said precedent will be overruled in the future. The laxer the rule of *stare decisis*, the weaker the incentive to bias the law.⁶⁴ The combination of weak precedent and jurisdictional polycentrism thus ensured the promulgation of

⁵⁵ His work was preceded by models which focused on individual variables within the judicial utility functions. One example is Kobayashi, B. & Lott, J., 'Judicial Reputation and the Efficiency of the Common Law' (1993 Wharton WP), where the argument is made that a judge who seeks to maximise his reputation will strive to maximise his citations, and will therefore attempt to upset precedent whenever he can. This can imply a considerable degree of inefficiency and instability. Another example is Higgins, R. & Rubin, P., 'Judicial Discretion' (1980) 9 JLS 129, in which it was shown that in the American judiciary there is no statistically significant relationship between reversal rates and promotion prospects.

⁵⁶ Posner, R., 'What Do Judges and Justices Maximise? (The Same Thing Everybody Else Does)' (1993) 3 SCER 1

⁵⁷ These command explicit attention in his simple formal model (ibid 31). Other variables, such as popularity with lawyers, prestige, avoiding reversal, and the consumption utility of voting (ibid 12-19) are subsumed under 'other', presumably to ensure formal tractability.

⁵⁸ This is my interpretation of Judge Posner's proposition that '[e]fficiency - not necessarily by that name - is an important social value that judges, given their limited remedial powers and the value pluralism of our society, can promote in a reasonably effective, consistent, objective and hassle-free fashion' (ibid 39-40)

⁵⁹ Zywicki (n 5)

⁶⁰ Ibid 35-62

⁶¹ This is the central argument in Klerman, D., 'Jurisdictional Competition and the Evolution of the Common Law' (2007) 74 UCLR 1179.

⁶² Crew & Twight (n 4)

⁶³ Zywicki (n 5) 56-8. This theme was developed further in Stringham, J. & Zywicki, T., 'Rivalry and Superior Dispatch: An Analysis of Competing Courts in Medieval and Early Modern England' (2011) 147 PC 497

⁶⁴ Zywicki (n 5) at 15ff.

efficient rules in pre-modern England. The hardening of *stare decisis* and the centralisation of the court system that took place toward the end of the nineteenth century⁶⁵ prompted the common law's decline.

In a more recent article, Professors Gennaioli and Shleifer advance a different, formal model of legal change under precedent.⁶⁶ They posit that cases can be distinguished on more than one dimension. In line with Posner⁶⁷, the authors assume that distinguishing is costlier than following. A theoretical novelty is then introduced. Each judge is said to favour one class of litigant over another.⁶⁸ The introduction of bias does not alter the efficiency prognosis. This counter-intuitive conclusion, which the authors term The Cardozo Theorem⁶⁹, follows from the fact that every incident of distinguishing serves to introduce further informational dimensions to the law.⁷⁰ While this benefit comes at the cost of short-term distortions, in the long-run the system maintains its tendency toward efficiency. The result is a weak-form efficiency hypothesis: while convergence to efficiency can only occur under highly implausible conditions⁷¹, the general trend under precedent is toward the development and retention of efficient rules.⁷² The strength of that tendency is dependent on the degree of ideological polarisation within the judiciary: a high degree of polarisation implies a mild tendency to efficiency, lower polarisation implies greater efficiency. Because of this, politically uncontroversial fields, among which corporate and contract law, are most likely to benefit from the benign influence of precedent.⁷³

The Gennaioli-Schleifer model is yet incomplete. While the authors demonstrate that the common law tends to efficiency under their assumptions, they do not attempt a comparison with a statutory system. Moreover, they assume that the initial choice of a rule fixes it on at least one dimension. This is incorrect as a matter of jurisprudence: it is perfectly possible, albeit relatively rare, for a common law judge to overrule binding authority.⁷⁴ It is equally possible to distinguish a previous rule to extinction⁷⁵, for instance

⁶⁵ Professor Zywicki also identifies the prevalent intellectual climate as a determinant of the course of legal evolution. (62-79) That such factors are important is also recognised in the wider literature, e.g. Atiyah, P., *The Rise and Fall of Freedom of Contract* (OUP 1979); Simpson, A., 'The Rise and Fall of the Legal Treatise: Legal Principles and the Forms of Legal Literature' (1981) 48 UCLR 632. I am however omitting such cultural factors because they do not relate very closely to the efficiency hypothesis, which is grounded in a more marketarian mode of analysis.

⁶⁶ Gennaioli, N. & Shleifer, A., 'The Evolution of Common Law' (2007) 115 JPE 43

⁶⁷ Posner (n 56)

⁶⁸ Gennaioli & Shleifer (n 66) 45-7

⁶⁹ From Justice Cardozo's famous dictum that '[t]he eccentricities of judges balance one another... Out of the attrition of diverse minds there is beaten something which has a constancy and uniformity and average value greater than its component elements' (Cardozo, B., *The Nature of the Judicial Process* (YUP 1921) 127).

⁷⁰ Gennaioli & Shleifer (n 66) 60

⁷¹ In particular, a complete lack of bias on behalf of every judge combined with a high degree of judicial activism. (ibid 59)

⁷² Ibid 62

⁷³ Ibid 47 and 62

⁷⁴ The Gennaioli-Shleifer model does not show a tendency to efficiency if *only* overruling is possible: Gennaioli, N. & Shleifer, A., 'Overruling and the Instability of Law' (2007) 35 CE 309

⁷⁵ Since the process is never made explicit, it is difficult to pinpoint an example with certainty. Many commentators would agree that this has been the fate of *Aluminium Industrie Vaassen v Romalpa Aluminium* [1976] 1 WLR 676 (see McCormack, G., *Secured Credit Under English and American Law* (CUP 2004), 182-9)

by confining it to its facts, or to deploy interpretative techniques that turn the incumbent on its head.⁷⁶ These concerns are addressed in a paper by Ponzetto and Fernandez⁷⁷. They assume that departure is possible but costly. The cost depends on the degree of divergence between the incumbent and its mooted alternative.⁷⁸ The judge has to balance the two at the margin. This analysis yields a common law which, although it is not immutable⁷⁹, reflects the policy preferences of all judges across time. The aggregation of such a large number of preferences is likely to yield a tendency to efficiency whose strength and stability are determined by the (in)flexibility of *stare decisis*.⁸⁰

What of the relative efficiency of statute and precedent? Firstly, in respect of ‘capture’ arguments, Ponzetto and Fernandez argue that both judges and parliamentarians are suspect to special group influence, and also the judiciary are additionally subjected to influence by the group of individuals who are affected by their decisions. Since the latter group of individuals is more diverse than the former, the judiciary’s output is likely to reflect superior informational inputs.⁸¹ Assuming that the area under consideration is static, therefore, the output of the legislature is unlikely to reflect the input of previous legislatures. The Cardozo Theorem is inapplicable. If the area under consideration is dynamic, however, the legislature will be better-placed to react in a timely manner.⁸² Accordingly, what I have dubbed the efficiency hypothesis holds for static areas of law but not for dynamic ones.

It might now be desirable to summarise the trends in the literature. Firstly, the view that there is an evolutionary mechanism within the common law that automatically pushes it to the most efficient laws has been largely abandoned. The prerequisites are so stringent as to never be fully satisfied in practice. Secondly, I have on a number of occasions adverted to the practice of circling on a limited set of institutional features of precedent.

⁷⁶ For example, in *Anisminic Ltd v Foreign Compensation Commission* [1968] UKHL 6, The House of Lords held that the words ‘the determination by the commission of any application made to them under [Foreign Compensation Act 1950] shall not be called in question in any court of law’ did not preclude the courts from reviewing determinations by the Commission because it would preclude the courts from holding such determinations to be nullities. (per Lord Reid at 7).

⁷⁷ Ponzetto, G. & Fernandez, P., ‘Case Law versus Statute Law: An Evolutionary Comparison’ (2008) 37 JLS 379.

⁷⁸ *Ibid* 388-9. It has already been pointed out that the main difference between the Ponzetto-Fernandez model and the Gennaioli-Shleifer one is that the former assumes that the cost of legal change differs in accordance with the distance between two rules. In Fernandez, P & Ponzetto, G, ‘Stare Decisis: Rhetoric and Substance’ (2012) 28 JLEO 313). Ponzetto and Fernandez justify and extirpate on the significance of that departure. (Since the efficiency of the common law is in their model dependent on the existence of such a relationship, it is necessary to identify a mechanism that increases the costs of abrupt legal change. They argue that the cost comes from the rhetorical demands of justifying departures. (At 320-1) Affording rhetoric paramount importance entails a choice between realism and formalism: the literal interpretation of their argument reduces legal logic to the role of a ‘smokescreen’ for the judge’s ideological biases. The authors instead argue that formalism introduces the necessary constraint on ideological pressures, that is, it conditions the available means of affecting change and thus limits the array of changes that an individual judge will in fact implement.

⁷⁹ Immutability also means that the system cannot converge at a perfectly efficient state, as is the case in the strong-form efficiency hypothesis.

⁸⁰ Ponzetto & Fernandez (n 77) 389

⁸¹ *Ibid* 396-8

⁸² *Ibid* 403-7

The most recent contributions to the literature, that by Professors Gennaioli and Shleifer and those by Ponzetto and Fernandez, are no exception. Those more recent contributions, however, tend to focus on the analytical techniques used within precedent.

II. Rules versus Standards

I now move to overview a different strand of the juridico-economic literature, namely that which develops the distinction between rules and standards.⁸³ Let me first explain the difference between the two titular concepts. A standard is vague and a rule precise. For example, we may have driving speed regulated by a standard, such as 'you must not drive at an excessive speed'. Or we may have a rule, such as 'you must not drive at a speed in excess of 50 km/h in cities'.⁸⁴ Which is better? To attack the problem, the literature conceptualises law as an information product. The lawmaker invests in writing legal instruments; economic agents invest in predicting the behaviour of the legal system. The optimal specificity of a law, then, is that at which the cost of further investments in information outstrips the marginal benefit of prognostic accuracy.

I begin with a contribution by Professor Diver.⁸⁵ Writing in the context of administrative law, he distinguished between three models of rules. Model I captures simple rules, such as 'you must not drive at a speed in excess of 50 km/h in cities'. Model II captures standards, such as 'you must not drive at an excessive speed'. Model III captures complex, multi-factor laws, such as 'you must not drive at a speed which is excessive, at no more than 50 km/h in cities, which speed can be higher or lower depending on traffic, the make of your car, visibility, and weather conditions'.⁸⁶ He further identifies three desiderata in the drafting of laws, namely transparency, accessibility, and congruence. Transparency denotes the ease with which legal predictions can be made. Accessibility refers to the amount of technical knowledge and effort required to understand the content of the law. Congruence indicates the degree of correspondence between the law's goals and the extent to which it achieves them. Model I offers transparency and accessibility, but not congruence. The goal behind a speed limit is to strike a balance between convenience and speed. Under a simple rule, some very able drivers will drive at a speed lower than the optimum and some very incompetent drivers will drive at a speed higher than what is best. Model II is less transparent, but more congruent: it is harder to make predictions about the law's application, but we may now fine-tune each application to the ability of

⁸³ The economic approach is not the only one. I will not summarise the voluminous non-economic literature here – I will instead refer to it in the main text whenever needed. For the Critical Legal Studies reading of the problem, the reader is referred to Kennedy (n 3) and Singer, J., 'The Player and the Cards: Nihilism and Legal Theory' (1984) 94 Yale LJ 1. For an ethical interpretation, see Shiffrin, S., 'Inducing Moral Deliberation: On The Occasional Virtues of Fog' (2010) 123 Harvard LR 1214. For an Austrian reading, see Rizzo, M., 'Law amid Flux: The Economics of Negligence and Strict Liability in Tort' (1980) 9 JLS 29; Whitman, D., 'The Rules of Abstraction' (2009) 22 RAE 21; Epstein, R., 'Intuition, Custom, and Protocol: How to Make Sound Decisions with Limited Knowledge' (2006) 2 NYUJLL 1. For a black-letter application of the theory to a body of law, see Sullivan, K., 'The Supreme Court, 1991 Term. Foreword: The Justices of Rules and Standards' (1992) 106 Harvard LR 22.

⁸⁴ Note that in reality the two exist on a spectrum: for example, 'you must not drive at an excessive speed' is a standard relative to 'you must not drive at a speed in excess of 50 km/h', but it is a rule in respect to the even more general 'you must drive carefully', which in turn is a rule relative to 'you must not endanger others', and so on and so forth. The binary formulation is for expository convenience only.

⁸⁵ Diver, C., 'The Optimal Precision of Administrative Rules' (1983) 93 Yale LJ 65.

⁸⁶ Professor Diver himself develops his examples in the context of airline pilot licensing. The ones in the main text are adapted to maintain congruence within the text

the particular driver. But the law is more complex, and therefore harder to understand. Model III is transparent and congruent, but it is less accessible than the others: the increase in complexity makes it harder for a lay person to discover the content of the law. Professor Diver then goes on to show that the optimal law will differ depending on the nature of the activity being regulated. For example, a simple rule is appropriate when we want to deter litigation. A standard is more appropriate when it is difficult to secure agreement on the specifics within the body that produces the rule. And a more detailed law is desirable when what is sought is uniformity of outcome

Professor Ehrlich and Judge Posner expanded the theory beyond administrative law.⁸⁷ They developed a model in which the optimal specificity of a legal provision depends on cost relative to benefit. Greater specificity increases the subjective probability that the lawmaker's desired activities will go unpunished and that undesired activities will be punished.⁸⁸ A standard, conversely, may have a chilling effect: individuals might forego certain activities even if the lawmaker wants them carried out. Moreover, a rule makes it easier to predict the outcome of a legal dispute. This in turn reduces the number of legal disputes and with that society's aggregate expenditure on legal representations. The cost of increasing specificity to the lawmaker is that of acquiring information about the desirable content of the rule. In order to determine what activities he desires, the lawmaker must inform himself about their nature and consequences. This is costly.⁸⁹ Increasing the specificity of a law also increases the cost of securing the assent of the individuals who comprise the lawmaking institution.⁹⁰ Professors Ehrlich and Posner also touch on statute. They say that precedent converts standards to rules: as a standard is applied by the judiciary, it becomes more precise. We are given examples of situations in which the legal system will or will not sanction a certain type of behaviour.⁹¹ Lastly, in a point whose import will become obvious in the next chapter, Professor Ehrlich and Judge Posner observed that there are diminishing returns from the specification of a standard.⁹²

I now come to the seminal article on rules and standards, that by Professor Kaplow.⁹³ There, the choice between rules and standards is conceptualised as a trade-off between the cost of information, borne by the lawmaker, and the cost of application, borne by the judiciary and the public. The theoretical novelty is that rules and standards are defined temporally: a rule is a legal command whose content is determined at the time of promulgation, whereas the content of a standard is decided at the time of application.⁹⁴ The promulgation of a rule involves an up-front investment in information, which in the case of a standard is postponed to the time of application.⁹⁵ Whether that postponement

⁸⁷ Ehrlich, I. & Posner, R., 'An Economic Analysis of Legal Rulemaking' (1974) 3 JLS 257

⁸⁸ Ibid 262

⁸⁹ Ibid 267

⁹⁰ Ibid

⁹¹ Ibid 261

⁹² Ibid 284

⁹³ Kaplow, L., 'Rules versus Standards: An Economic Analysis' (1992) 42 Duke LJ 557

⁹⁴ Ibid 560

⁹⁵ Drawing the distinction thus is an important novelty, since it allows us to distinguish between the complexity of a legal command and its specificity. On Professor Kaplow's framework, any standard can be mirrored by a rule: for example, the law 'you must keep your promises' may be rendered as 'if you agree to do something in return for valuable consideration with the intent to create legal relations and if there is no mistake or frustration

is desirable turns, among others, on the frequency with which the behaviour in question occurs in society.⁹⁶ If some behaviour occurs rarely, or if it does not occur at all, then up-front investments in information about its consequences would be wasteful. Like Professor Ehrlich and Judge Posner, Professor Kaplow discusses the role of precedent.⁹⁷ He is also of the view that precedent can convert a standard into a rule. Unlike them, he is alive to the costs: while the process of conversion is ongoing, economic agents will be guided by an imprecise legal command. Whether the loss from errors in this period outweighs the benefits of the courts converting rules into standards is, in his view, an open question.

Professor Kaplow's work remains the golden standard in the field, so much so that the next two articles which I will summarise are best read as elaborations on his theory. The first important refinement was introduced by Professor Korobkin.⁹⁸ The papers I discussed previously rest on the neoclassical assumption that agents react rationally to incentives. Professor Korobkin relaxed that supposition in order to incorporate elements of behavioural studies into the analysis. He argues, firstly, that self-serving biases might serve to mitigate what Professor Ehrlich and Judge Posner call the chilling effect of standards. An individual might be more certain that a standard permits a specific form of behaviour than the text of the standard actually suggests.⁹⁹ Second, hindsight biases can generate a substantive, rather than merely formal, difference between the *ex ante* promulgation of a legal command, which is untainted by that bias, and its *ex post* application, which is.¹⁰⁰ Since it is difficult to compare the strength of such effects, which here push in opposite directions, Professor Korobkin concludes that the choice between rules and standards is more complex than what had previously been argued.¹⁰¹

The most recent development of the theory comes from a contribution by Doctor Friedman and Professor Wickelgren.¹⁰² They discuss the sorting effect of standards. Under a standard, parties may be impelled to expend more on legal representation. This might appear inefficient – if a standard is chosen ahead of a rule, aggregate legal expenditure increases.¹⁰³ However, if decisions under the standard have *ex post* allocative

then upon failure to do the agreed thing you must pay damages or, if the subject matter of the contract is unique, you must perform the agreed act'. In this case, a simple standard is matched by a complex rule. This in turn allows Professor Kaplow to divorce the rules-and-standards dichotomy from the over- and under-inclusion debate, which as was seen dominated much of the earlier thinking on the subject. If every standard can be matched by a rule, then it cannot be that the standard is more or less inclusive than the rule. The only difference is the time at which the cost of information is born by the lawmaker.

⁹⁶ Kaplow (n 93) 569

⁹⁷ Ibid 611-6

⁹⁸ Korobkin, R., 'Behavioral Analysis and Legal Form: Rules vs Standards Revisited' (2000) 79 Oregon LR 23

⁹⁹ Ibid 46-7

¹⁰⁰ Ibid 48-9

¹⁰¹ Ibid 58-9

¹⁰² Friedman, E. & Wickelgren, A., 'A New Angle on Rules versus Standards' (2014) 16 ALER 499

¹⁰³ This might be contrasted with the argument that legal uncertainty in general is desirable when the parties are capable of negotiating in the shadow of a standard. The foremost authorities for that proposition are Johnston, J., 'Bargaining under Rules versus Standards' (1995) 11 JLEO 256 and Ayres, I. & Talley, E., 'Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade' (1995) 104 Yale LJ 1027. The theme in both contributions is that if there is doubt as to who owns an entitlement, then the parties might be induced to reveal their valuation of it, which in turn facilitates exchange. For a rendition which is targeted at a legal audience, see

consequences, the tendency to expend more on representation produces a sorting effect. The party that favours the efficient outcome, say the authors, will spend more on representation. This will in turn make it more likely that the judge will favour that side, and with it the efficient outcome.¹⁰⁴ Note, further, that the sorting effect can only manifest if the courts can produce laws. If they cannot change the law, then their decision will seldom have *ex post* efficiency implications. Standards, in the last analysis, are more beneficial if the system is precedential than if it is purely statutory.

Let me now discuss two alternative perspectives. Professor Sunstein argues that the objective of rules is unattainable. It is impossible to specify all outcomes ahead of application.¹⁰⁵ Even under very strict rules, such as ‘you must not drive at over 50 km/h in cities’, there are bound to be cases which produce manifest absurdity, like that of a police officer being prosecuted for exceeding the limit while chasing a criminal. And once we permit for one exception, we effectively permit for many – once the police officer is absolved, it is also open for a diabetic to argue that he could speed in order to buy insulin, and if we permit that then it is also possible for a bride to say she could speed because she was running late for the altar, and so on and so forth.¹⁰⁶ Distinguishing between one case and another is a matter of social and moral judgment, whose application is subjective and fact-sensitive. Thus we cannot, at the time of rule promulgation, make definitive predictions about rule application. A potential way out, Professor Sunstein argues, is not to distinguish between rules and standards (or in his terms, rules and rulelessness), but rather between rules which dictate ends and ones which dictate means.¹⁰⁷ The former are more open-ended and permit for private adjustment.

Professors Casey and Niblett argue that technology will render the rule-standard distinction obsolete.¹⁰⁸ Both types of legal command will, in the authors’ view, be superseded by micro-directives. Those are laws calibrated to achieve the lawmaker’s desired results *ex ante* but which are also automatically fine-tuned to the individual facts of every case. The elimination of the information-certainty trade-off will come about as a result of technological advances. Firstly, the ascendancy of Big Data will enable computers to make very accurate predictions, so that the lawmaker will only need to input his policy objectives into a computer – problems of implementation will disappear.¹⁰⁹ Second, even though the resultant set of micro-directives would be too large for any individual member of society to familiarise themselves with all, advances in communicative technology will allow each micro-directive to be channelled to its addressee if and when it is needed.¹¹⁰

Katz, A., ‘The Economics of Form and Substance in Contract Interpretation’ (2004) 104 Columbia LR 496. It must be said that acceptance of this argument is far from universal: for the counterargument, see Kaplow, L. & Shavell, S., ‘Do Liability Rules Facilitate Efficient Bargaining: A Reply to Ayres and Talley’ (1995) 105 Yale LJ 221.

¹⁰⁴ Friedmann & Wickelgren (n 102) 431-6

¹⁰⁵ Sunstein, C., ‘Problems with Rules’ (1995) 73 California LR 953

¹⁰⁶ *Ibid* 986-90

¹⁰⁷ *Ibid* 1016-20

¹⁰⁸ Casey, A. & Niblett, A., ‘The Death of Rules and Standards’ (forthcoming 2017) Indiana LR

¹⁰⁹ *Ibid* 43-4

¹¹⁰ *Ibid* 10-13

Neither of these approaches render the mainstream irrelevant. Professor Sunstein does not dispute that there is a trade-off – indeed he affirms it – but merely discusses alternative solutions.¹¹¹ Professors Casey and Niblett do not argue that their prediction has come to fruition already – it is not in doubt that for now we must content ourselves with managing the cost of information. The Kaplowian orthodoxy survives. Since much of what follows is an application of that orthodoxy, I now want to give two examples of extensions that have been previously developed in the literature. Their relevance to the matters discussed in the instant dissertation is only indirect. They show the practical implications of the rule-standard dichotomy, but they say nothing about the choice between precedent or statute. I nonetheless think they might be of some illustrative value.

Firstly, there is the contribution by Professor Schäfer.¹¹² He analyses the choice between rules and standards in the context of developing countries. The point is this: the use of standards is human-capital intense. To deploy in the sort of purposive decision-making which a standard demands, a country must have a well-trained judiciary and a skilful bureaucracy.¹¹³ A developing country has a lower endowment of human capital relative to a developed one.¹¹⁴ Consequently, so long as that endowment remains low, it is better to stick with rules, which are cheaper to apply. As the endowment of human capital grows, it becomes possible to switch to standards.¹¹⁵

The other application that I wish to consider is that developed by Professor Weber.¹¹⁶ She shows that there is a close analogy between rules and standards on the one hand and EU regulations and directives on the other. A regulation provides clear rules from which the national legislature cannot deviate. A directive provides looser, objective-based provisions that leave some leeway to the implementing Member State.¹¹⁷ Professor Weber then considers two additional factors which are peculiar to European integration – the cost of switching from a pre-existing national law to a trans-European one¹¹⁸ and the information cost economy from legal uniformity.¹¹⁹ From this Professor Weber infers several useful policy recommendations. For example, the more detailed a particular provision, the likelier it is that a regulation should be favoured.¹²⁰ And in ‘core’ areas of

¹¹¹ Sunstein (n 105) 969-80

¹¹² Schäfer, H., ‘Rules versus Standards in Rich and Poor Countries: Precise Legal Norms as Substitutes for Human Capital in Low-Income Countries’ (2006) 14 SCER 113.

¹¹³ Ibid 121-3

¹¹⁴ Ibid 122

¹¹⁵ For an example see Black, B. & Kraakman, R., ‘Corporate Law from the Scratch’ in Frydman, R. et al, *Corporate Governance in Central Europe and Russia: Insiders and the State* (CEU 1996). For an application of Professor Schäfer’s analysis to environmental law in developing countries, see Faure, M., ‘Environmental Rules versus Standards in Developing Countries: Learning from Schäfer’ in Eger, T. et al, *Internationalization of the Law and Its Economic Analysis* (Gabler 2008).

¹¹⁶ Weber, F., ‘European Integration Assessed in the Light of the ‘Rules versus Standards’ Debate’ (2013) 35 EJLE 187

¹¹⁷ Ibid 197-8

¹¹⁸ Ibid 203-5

¹¹⁹ That economy is greater the more rule-like the measure, since individual national legislatures are less free to introduce heterogeneity. On heterogeneity see further Arcuri, A. & Dari-Mattiacci, G., ‘Centralisation versus Decentralisation as a Risk-Return Trade-Off’ (2010) 53 JLE 359

¹²⁰ Ibid 202

particular legal traditions, switching costs might be so high that directives should be preferred to regulations.¹²¹

To sum up, it is widely accepted that the difference between a standard and a rule is that the cost of producing the former is incurred at the time of application and that the cost of producing the latter is incurred at the time of promulgation. The literature also sees precedent-versus-statute and rules-versus-standards as related issues. Virtually all authors in the latter field agree that the courts can convert a standard into a rule. Moreover, in the latest contribution to the theoretical literature, that by Doctor Friedman and Professor Wickelgren, it is said that the courts receive better information than the legislature by virtue of a sorting effect.

III. Information under Precedent and Statute

The third, and last, rubric that I will overview concerns information and regulation. The reader will recall that in the rules-versus-standards literature, it is said that law production entails an investment in information. That literature then discusses the optimal timing of that investment. For instance, Professor Kaplow posits that a rule requires an up-front investment in information, whereas a standard permits the lawmaker to spread that investment over time. Quite apart from this, there is the issue of the investment's magnitude, statically conceived. By this I mean that the cost of writing a certain law, irrespective of timing, might be higher or lower under precedent or statute. The orthodox view is that the decentralised courts acquire information at a lower cost than the centralised legislature. This is so because precedent is a bottom-up method of producing law and statute a top-down one. The courts, being 'closer' to the information, acquire it more cheaply.¹²²

The point originated from the Austrian school. It was then assimilated into the neoclassical mainstream.¹²³ Menger¹²⁴ distinguished between two types of law. The first is law formed in the course of customary dealings between economic agents.¹²⁵ The second is law which is imposed by those who govern on those who are governed.¹²⁶ The first is preferable to the second because it represents information gathered by society rather than the will of centralised power. Building on this, Hayek¹²⁷ wrote that the courts

¹²¹ Ibid 203

¹²² The reader might suppose that this is a strand of the 'efficiency of common law' literature which I discussed above. It is not. The proposition here is that the courts acquire information more cheaply. This does not necessarily mean that the law which is produced *from* that information is more efficient. A perfectly informed lawmaker is free to engage on a course of Stalinist oppression if he so desires. The Austrian point instead has to do with cost-effectiveness: law is cheaper to make through the courts. For an elaboration on this theme, see Rizzo, M., 'The Mirage of Efficiency' (1980) 8 Hofstra LR 641.

¹²³ For an overview of the impact of Austrian thought on modern theory see Ogus, A., 'Law and Spontaneous Order: Hayek's Contribution to Legal Theory' (1989) 16 JLS 393.

¹²⁴ Menger, C., 'The 'Organic' Origin of Law and the Exact Understanding Thereof' in Nock, F. (tr), *Investigations into the Method of the Social Sciences with Special Reference to Economics* (1963 NYUP)

¹²⁵ Ibid 224

¹²⁶ Ibid 229

¹²⁷ See Hayek, F., *Law, Legislation, and Liberty: Rules and Order* (1978 Routledge)

are in close contact with the disputes of the governed, and are thus more likely to produce law which reflects their customs.¹²⁸

Subsequent contributions illustrate the theoretical point. Professor Benson¹²⁹ discusses the evolution of modern contract law. After the collapse of the Roman Empire, the trade networks of antiquity collapsed. Commerce only re-emerged around the turn of the first millennium. Merchants developed their own laws, which were based on informality and custom. As trade expanded, the common law courts took over the operation of the mercantile arbitration systems, along with the *lex mercatoria*. If this is correct, then judge-made law may be said to reflect the information which had been accumulated by the business community between the ninth century and the time of Lord Mansfield.¹³⁰

Professor Rubin applies the same reasoning to more modern conditions.¹³¹ He discusses the transition process in former Warsaw Pact countries. In his view, the debate about the optimal rate of privatisation overlooked the importance of designing efficient laws.¹³² In Professor Rubin's view, following the dissolution of the Soviet Union, enterprise adapted itself to the new conditions, but the law lagged behind. He goes on to argue that attempts at devising civil codes *de novo*, or at transplanting foreign civil codes, were misdirected: it would have been easier for information to be accumulated through the process of litigation. A law suited to local conditions could be produced more cheaply in this fashion.¹³³

I said that the Austrian point that the courts have superior information is now part of the neoclassical mainstream. I will give two examples. The first is the structuralist critique of the efficiency of the common law hypothesis. Professor Cooter¹³⁴ posits that the common law can only be efficient if it reflects efficient social norms. He then goes on to suggest that the courts, when choosing what customs to elevate to law, should develop criteria to differentiate between efficient and inefficient customs.¹³⁵ This is better than pursuing efficiency directly. The courts lack the information to make cost-benefit calculations. But they are well informed in respect of social practices.¹³⁶ Latent in this argument is the idea

¹²⁸ Ibid 72-91

¹²⁹ Benson, B., 'The Spontaneous Evolution of Commercial Law' (1989) 55 Southern EJ 644. Similar points are made in Friedmann, D., 'Private Creation and Enforcement of Law: A Historical Case' (1979) 8 JLS 399; Stringham, E., 'The Emergence of the London Stock Exchange as a Self-Policing Club' (2002) 17 JPE 1; Stringham, E., 'The Extralegal Development of Securities Trading in Seventeenth Century Amsterdam' (2003) 43 QREF 321; Kadens, E., 'The Empirical and Theoretical Underpinnings of the Law Merchant: Order within Law, Variety within Custom: The Character of the Medieval Merchant Law' (2004) 5 CJIL 39

¹³⁰ Ibid 649-53. Lord Mansfield is generally credited with bringing the common law in line with the *lex mercatoria*: see for example *Carter v Boehm* (1766) 3 Burr 1905.

¹³¹ Rubin, P., 'Growing a Legal System in the Post-Communist Economies' (1994) 27 CILJ 1

¹³² Ibid 2

¹³³ Ibid 10-11. See further Reid, E. (tr), Topornin, N., 'The Legal Problems of Economic Reform in Russia' (1993 DH) 18-31.

¹³⁴ Cooter, R., 'Decentralised Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant' (1996) 144 UPLR 1644

¹³⁵ Ibid 1681ff

¹³⁶ Ibid 1695

that a decentralised lawmaker, such as the courts, is closer to the relevant information than a centralised one, such as the legislature.¹³⁷

The second example which I want to discuss has to do with rules and standards. Both the Posner-Ehrlich analysis and the one developed by Professor Kaplow consider it a settled point that the courts can convert a standard into a rule cheaply by trying cases.¹³⁸ The underlying idea is that by observing the circumstances which give rise to litigation, judges become better-informed than parliamentarians, who are far removed from adjudicative reality. Because judges acquire information more cheaply, they are better-placed to make the law more specific. Again, the latent point is that the legislature is at a disadvantage as far as the cost of information is concerned.

Let me now summarise the main trends. There is the view that the decentralised courts are superior, in informational terms, to the centralised legislature. That view is of very long pedigree. It is afforded near-axiomatic deference within and without the Austrian literature, and it is backed with considerable evidence.¹³⁹ It must be pointed out, however, that it is based on a narrow conception of information as existing knowledge dispersed among members of society. As I will argue shortly, expanding the definition might well change the conclusions.

IV. Discussion

Now that I have described the three rubrics under consideration, I will say how they overlap, how I think my work fits into that overlap, and lastly how I propose to advance the debate in each. It was seen that the efficiency of the common law hypothesis predicts that common law rules will be more efficient than statutory ones. The rules-versus-standards literature gives us one way of gauging the efficiency of the lawmaking process: an optimal system would produce the most certain law at the lowest cost. The information under precedent and statute literature posits that the lawmaker will acquire information at a lower cost if he is a judge and at a higher one if he is a parliamentarian. We may connect the three to formulate a composite hypothesis: courts acquire information at a lower cost, so that all other things being equal, they will produce laws at a lower cost. Consequently, precedent is a more cost-effective law production technology than statute. If precedent and statute are otherwise equal, it is better to choose the technology which delivers results at a lower cost. Consequently, the lower cost of information under precedent is a reason to believe that precedent is generally better, that is more efficient, than statute. The common law uses precedent more often than the civil law. It follows, then, that the lower cost of information under precedent translates into an advantage for common law legal systems.

¹³⁷ Ott, C & Schafer, H., 'Emergence and Construction of Efficient Legal Rules in the Legal System of German Civil Law' (1993) 13 IRLE 285 explores a similar structuralist theme in the context of a predominantly statutory system. The authors examine instances where the statute refers to a general concept whose content is to be fleshed out by reference to social norms. Again, in the last analysis the task falls to the judiciary (290-5). The authors then discuss the difference between judicial law-making and the incorporation of customs into the law. In the event that the latter is to be preferred, this must be due to the courts' superior information – otherwise it is a puzzle why the legislature leaves the law in question vague in the first place.

¹³⁸ See Ehrlich & Posner (n 87) 266ff and Kaplow (n 93) 585 and 611-4

¹³⁹ See the authorities cited at n 129.

Throughout this dissertation, I try to cast doubts over this reasoning. In the first and second parts, I try to show that the outputs of precedent are oftentimes less certain than those of statute. If the cost of information to the lawmaker under precedent is lower but the outputs are less certain, then it there is no way of telling which is superior. In the third part, I question the underlying assertion that information is cheaper for judges than for parliamentarians. If there exist conditions under which information is more expensive under precedent and the resultant laws are less certain, then there are in fact good reasons to believe that statute is better than precedent. Clearly, the argument takes aim at the efficiency of the common law hypothesis. If statute produces clearer rules at a lower cost, then the common law might be inefficient.

If this is too ambitious, I propose two other implications of my work that might be useful. First, the argument that the courts have better information than the legislature has not been revised since the times of Hayek. The economic understanding of information, the technology which we use to transmit and process it, and the law itself have changed considerably since then. As I will show in the third part, it is possible to qualify the orthodox analysis in many ways. This has policy ramifications beyond the choice between common and civil law.

Secondly, in respect of rules-versus-standards I introduce a qualification and an application. The qualification applies to the proposition that the courts can convert a standard into a rule through litigation and that this is oftentimes cheaper than announcing a rule from the outset. In Part I, I show that the accumulation of precedent may in fact have the opposite effect: it may turn a rule into a standard. I also expand the range of applications of Professor Kaplow's theory. In Part II, I discuss higher-order, or hierarchic, legal uncertainty. And I show that the higher-order laws, or metalaws, which control it are governed by the same principles which Kaplow identified in respect of ordinary laws. This in turn has important implications for the general certainty of precedential systems, as well as some contested areas of international law.

Having advertised this work's significance at some length, let me now say what it does not try to accomplish. Firstly, I do not say anything here about the substantive efficiency of judge-made law or statutes. I only speak about certainty and information. Certainty and substantive efficiency are quite different, and in many ways independent. A specific rule which induces inefficient behaviour is worse than a vague standard which induces efficient behaviour.¹⁴⁰ I say here that statutory law is very often more certain than judge-made law. But I do not say that statutory law allocates entitlements to those who value them the most, or that it reduces transaction costs, or anything to that effect. The reason I skirt the topic is hopefully apparent from my discussion of the efficiency of the common law hypothesis earlier – it appears that we do not presently have the methodology to tackle the problem, and any attempt to do so is inconclusive at best.

Secondly, this is a work of theory. It yields testable hypotheses, but it does not test them. Many of the questions on which I touch here have been tested. The 'efficiency of the

¹⁴⁰ An uncertain law such as 'you must drive reasonably or be punished' might generate more efficient behaviour than a very specific one, such as 'you must drive at under 25 km/h or face the death penalty'.

common law' literature, for example, has its empirical counterpart in 'legal origins'.¹⁴¹ Likewise, there are empirical studies of rules and standards¹⁴² and information transmission under precedent and statute.¹⁴³ I offer nothing of the sort here. I do discuss real-world legal developments. – for example, in Part II I devote some space to the historical development of the consequential damages rule, in Part II I devote quite some time on the choice between specific performance and expectancy, and in Part III there is a discussion of the civil jury. But these are not intended as proofs. Rather, all that I attempt is to illustrate the practical operation of the abstract concepts that I discuss.

Thirdly, there is a well-known comparative-law argument against the efficiency hypothesis which I cover here only partly. The argument, in brief, is this: the efficiency hypothesis grounds the common law's superiority on its use of precedent. But the civilians too use precedent. Therefore, the statute-precedent dichotomy makes little difference to the comparison between the common and the civil law. Whatever difference that dichotomy does make is surely too small to justify anything assertoric. My intuition, for what it is worth, is that this argument is correct. I have striven to account for it here by keeping my terminology 'clean': I use the terms 'statute' and 'precedent' to denote lawmaking technologies and 'common law' and 'civil law' to denote whole legal systems. I have nonetheless not attempted to contribute significantly to the comparativist argument that I just outlined. Why so? The theoretical aspects of that argument are well-grounded in the literature.¹⁴⁴ The way forward, I think, would be to provide counter-instances to the efficiency hypothesis. Those might take the form of specific civilian institutions which are as or more efficient than their common-law counterparts.¹⁴⁵ As a non-comparativist, I think I am poorly placed to describe or analyse such counter-instances. I do, however, cover one aspect of the comparativist argument in Chapter 9, which applies the jurisprudential theory developed in the preceding chapters to some comparative material. There, I argue that the civilians oftentimes make better use of

¹⁴¹ For a general overview of that literature, see La Porta, R., Lopez-de-Silanes, F. & Shleifer, A., 'The Economic Consequences of Legal Origins' (2008) 46 JEL 285, as well as Djankov, S. et al, 'The New Comparative Economics' 31 JCE 595. The fit between the efficiency of the common law hypothesis and the legal origins is imperfect, that is, the latter does not necessarily prove the former. The differences are discussed in, among others, Priest, G., 'Micro and Macro Legal Efficiency: Supply and Demand' (2005) 13 SCER 19 and Garoupa, N. & Liguerré, C., 'The Syndrome of the Efficiency of the Common Law' (2011) 29 BUIJL 287. A more general critique of legal origins is provided in, among others M Faure & J Smits (eds), *Does Law Matter* (2011 Intersentia, Menard, C. & de Marats, B., 'Can We Rank Legal Systems According to their Economic Efficiency' in Nobel, P. (ed), *New Frontiers in Law and Economics* (Sankt Gallen 2006).

¹⁴² E.g. Braithwaite, J. & Braithwaite, V., 'The Politics of Legalism: Rules versus Standards in Nursing-Home Regulation' (1995) 4 SLS 307.

¹⁴³ E.g. Kearney, J., 'The Influence of Amicus Curiae Briefs on the Supreme Court' (2000) 148 UPLR 743 or Linas, K. & Twist, K., 'The Supreme Court, The Media, and Public Opinion: Comparing Experimental and Observational Methods' (2016) 45 JLS 223

¹⁴⁴ Zweigert, K. & Kötz, H., *An Introduction to Comparative Law* (3rd edn, Clarendon 1998); Zweigert, K., 'Methodological Problems in Comparative Law' (1972) 7 Israel LR 465; Zweigert, K., 'Possibilities of Comparing Analogous Institutions of Law in Different Social Systems' (1973) 15 *Acta Juridica Academiae Scientiarum Hungaricae* 107; Michaels, R., 'The Functional Method of Comparative Law' in Reimann, M. & Zimmermann, R., (eds) *The Oxford Handbook of Comparative Law* (OUP 2006); Garoupa & Liguerré (n 141); Faure & Smits (n 141); Menard & de Marats (n 141).

¹⁴⁵ M Braham (tr), Schäfer, H. & Ott C., *The Economic Analysis of Civil Law* (Edward Elgar 2005) contains quite a few.

precedent than the English. On the broader point of whether German, or French, or Italian, or Dutch law is more efficient than English, or American, or Australian law, I say nothing.

V. Conclusion

Let me now conclude. This being a summary of a summary, I will do so very briefly. In discussing precedent and statute, I aim to contribute to three strands of the juridico-economic literature: the efficiency of the common law hypothesis, rules-versus-standards, and information in lawmaking. The first argues that the common law tends to efficiency in the way that the civil law does not. The second posits a trade-off between *ex ante* investments in information and *ex post* uncertainty costs. The third argues that bottom-up law production is superior to its top-bottom counterpart. The three can be arranged into a coherent whole: the courts, with their cheaper information, convert standards into rules. Thus they offer information at a lower cost and laws which are less uncertain. This substantiates the efficiency of the common law hypothesis. In the pages that follow, I try to show that the courts may face high information costs, that they can convert a rule into a standard, thus increasing the cost of uncertainty, and ultimately that there are good reasons to doubt the presumptive advantages of precedent. It is to these problems that I now turn.

Chapter III

TWO TYPES OF LEGAL UNCERTAINTY

When law-and-economics scholars discuss legal uncertainty, they problematise the use of vague language in the drafting of laws.¹ Here, I would like to contrast that meaning of the term with another. When we say that the law is uncertain, we might mean that two (or more) laws overlap, so that we do not know which is applicable to the facts of a particular case. I call the problem that the law-and-economics literature covers applicative uncertainty and the 'new' one hierarchic uncertainty. I will try to show that the two always coexist, and further that there is a trade-off between them: as the law becomes more applicatively certain, it also grows more hierarchically uncertain. I sketch out the economics of that trade-off and I discuss the implications for legal certainty in general.

I. Legal Uncertainty, Legal Theory, and Law-and-Economics

I am by no means the first to write on legal uncertainty. Indeed, as a rubric uncertainty is a mainstay of both legal theory and law-and-economics. But legal theorists and law-and-economics scholars mean different things when they use the term 'uncertainty'. What I call applicative certainty is extensively covered in both strands of the literature. Hierarchic uncertainty is new to law-and-economics, but not to legal theory. To avoid confusion and to contextualise this paper, it is best that I begin with a brief summary of the main authorities on the point.

Applicative uncertainty is the uncertainty that results from the need to apply general laws to specific facts. In law-and-economics, Kaplow, among others, distinguishes between standards and rules, and says they differ in their level of generality.² That conceptualisation is analogous to the positivist understanding of uncertainty. Kelsen speaks of a norm's 'frame of application'.³ All laws are written in human language, and human language is vague. Therefore, every law establishes a frame in which a number of outcomes can lie. Hart speaks of a core and a penumbra⁴. Every legal norm has a core, that is, a set of factual matrices whose subsumability under the norm's text is self-evident. Norms also have penumbræ, that is, there are always factual situations to which the applicability of the norm is essentially contestible. Raz speaks of indeterminacy on a continuum⁵: there are legal questions to which there are true or false answers, questions

¹ See for example Kaplow, L., 'Rules versus Standards: an Economic Analysis' (1992) 42 Duke LJ 557; Ayres, I. & Talley, E., 'Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Trade' (1995) 104 Yale LJ 1027; Johnston, J., 'Bargaining under Rules versus Standards' (1996) 11 JLEO 256; Korobkin, R., 'Behavioral Analysis and Legal Form: Rules v Standards Revisited' (2000) 79 Oregon LR 23; Ehrlich, I. & Posner, R., 'An Economic Analysis of Legal Rulemaking' (1974) 3 JLS 257; Schäfer, H., 'Rules versus Standards in Rich and Poor Countries: Precise Legal Norms as Substitutes for Human Capital in Low-Income Countries' (2006) 14 SCER 113; Weber, F., 'European Integration Assessed in the Light of the "Rules versus Standards" Debate' (2013) 35 EJLE 187; Friedman, E. & Wickelgren, A., 'A New Angle on Rules versus Standards' (2014) 16 ALER 499;

² Kaplow (ibid) 560

³ Kelsen, H., Paulson, B. & Paulson, S., (trs), *Introduction to the Problems of Legal Theory* (2002 OUP) 80

⁴ Hart, H., 'Positivism and the Separation of Law and Morals' (1958) 71 Harvard LR 593, 607-15.

⁵ Raz, J., *The Authority of Law: Essays on Law and Morality* (1979 OUP) 72-4

to which there is no true or false answer, and questions to which it is unclear whether there is a true or false answer.

Applicative uncertainty in law-and-economics is analogous to uncertainty in legal positivism. In the writings of Kelsen, Hart, and Raz, all laws produce uncertainty because they are partly inexact. In law-and-economics, that is taken as a *donnee* and the central question is *how* uncertain individual laws should be. In Kelsenian terms, law-and-economics scholars try to find the optimal width of a law's frame of application. The same point can be translated into Hart's terminology by saying that the juridico-economic concern is with the optimal size of a law's penumbra. And in the language of Raz, the purpose of the enterprise is to ascertain the optimal number of questions to which there is a true or false answer.

I now turn to hierarchic uncertainty. Barring a footnote in Kaplow's work⁶, law-and-economics is silent on the point. In legal theory, on the other hand, hierarchic uncertainty is amply covered. Kelsen spoke of a 'chain' of legal norms which exist in a hierarchical relationship⁷. He was also of the view that higher-order norms have frames of application, leaving open the possibility of there being a number of equally plausible lower-level norms.⁸ Hart distinguished between primary and secondary rules – laws and metalaws in the language of this paper. Secondary rules serve to identify primary rules. To Hart, secondary rules are subject to the ordinary constraints of human language, including its 'open texture'.⁹ Cases may arise where a choice has to be made between two primary rules by reference to a secondary rule which is too vague to guide that choice.¹⁰ In those circumstances, there is hierarchic uncertainty: a clash of two primary rules with no indication of which ought to prevail. Raz is also alive to the problem. He posits that sometimes a legal decision must be made but the law supplies conflicting reasons.¹¹ There are situations in which the law gives no indication of the reason to be preferred, others in which the two are equally matched, and others still in which the reasons are incommensurate. Such gaps, Raz shows, are inescapable in any legal system.¹²

Here, I follow Hart and Raz, that adhesion manifesting in two specific assumptions. Firstly, I assume that there are facts to which two (or more) laws apply and that those laws may point to two (or more) different outcomes. Secondly, and more controversially, I assume that such conflicts can, but need not be, resolved only through metalaws produced by a lawmaker. I treat the Sources Thesis as a given.¹³ Why might this be controversial? Dworkin, in challenging Hart, has made the argument that although uncertainty exists, it is always soluble by reference to 'principles' immanent in the juridico-political order.¹⁴ Principles, in Dworkin's terminology, are closely analogous to metalaws in mine. My

⁶ Kaplow (n 1) n 150 *infra*

⁷ Kelsen (n 3) 71-5

⁸ *Ibid* 78

⁹ Hart, H., *The Concept of Law* (2nd edn, 1994 OUP) 125ff

¹⁰ *Ibid* 134-6

¹¹ Raz (n 5) 74-6

¹² *Ibid* 77

¹³ *Ibid* 47ff; Raz, J., 'Legal Principles and the Limits of Law' (1972) 81 Yale LR 823

¹⁴ See Dworkin R., 'The Model of Rules' (1967) 35 UCLR 14; Dworkin, R., 'No Right Answer?' (1978) 53 NYULR 1; Dworkin, R., *Law's Empire* (1986) HUP 87-114

theory, however, is not consistent with his. If it is always possible to discover a metalaw that gives the 'correct' outcome of a case, then evidently there is in every case a perfectly specific solution to hierarchic uncertainty. Even though there is hierarchic uncertainty, it is not a problem that needs to be solved through the creation of new metalaws. There is only the issue of finding them. I add nothing to that argument here, other than noting that full acceptance of Dworkin's thesis would, for better or for worse, render most of the law-and-economics literature on the subject meaningless. Applicative uncertainty is unproblematic if whenever it arises, a cannon of interpretation exists which delivers an unambiguous resolution to the controversy at hand. If one agrees with Dworkin's version of uncertainty, then, one is unlikely to find the kind of analysis developed here very useful.

Lastly, I should mention another non-positivist account of law to which I think my theory applies, but to which I have not sought to contribute here. Legal realism implies, loosely speaking, that judicial ideology matters.¹⁵ Theorists in that tradition are generally divided on the extent to which a judge's personal ideological preferences are determinative of legal outcomes. On a 'hard' legal realist conception, ideology preordains all judicial outcomes. To this my account of hierarchic uncertainty has little to contribute, since the focus is obviously at some remove from the interrelationship between laws within the system. A milder realist account of judicial decision-making posits that legal materials, such as laws, can be fashioned into arguments for one outcome or another through legal work.¹⁶ The pliability of the materials is evidently determinative, though only partly, of the range of potential outcomes. Hierarchic uncertainty is thus a property of those materials that matters to judicial output. Although I think what follows might be applicable to theories grounded in that milder realist position, I do not examine the implications in any detail.

II. Applicative and Hierarchic Uncertainty

Let me begin by defining 'a law'. By that term, I do not here mean 'all law' or 'the law', nor does my usage cover the entire spectrum of statements which in ordinary parlance are called laws. Nor do I propose to build a novel theory of law in these pages – I use the term merely to denote the specific type of provision which forms the subject matter of my analysis. To my ends here, a law is a sanctionability condition. It is a description of the conditions in which the state will deploy its coercive machinery against some individual. This might on first impression appear to limit me to criminal and administrative law. That impression is misleading: for example, the law of contract guarantees that if parties choose some arrangement, the state will facilitate it through the threat of coercive enforcement, or ultimately through its execution. Many of its substantive provisions:

¹⁵ Singer, J., 'The Player and The Cards: Nihilism and Legal Theory' (1984) 94 Yale LJ 1; Frank, J., *Law and the Modern Mind* (TP 1930).

¹⁶ Kennedy, D., 'A Left/Phenomenological Alternative to the Hart/Kelsen Theory of Legal Interpretation' in Kennedy, D., (ed), *Legal Reasoning: Collected Essays* (2008 Davies Pub)

remedies, penalty clauses, and others, refer to sanctions for non-compliance – they are laws in the sense in which I defined the word here. Likewise in torts and in property.¹⁷

Laws thus defined may and most commonly are positive, as is the case when the state declares that certain actions or inactions¹⁸ will trigger some sanction. Laws can also occasionally be negative, as they are when the state declares that some course of conduct will attract no liability. For expositional convenience, let me now give three examples of statements that can constitute laws:

- (A) If a person negligently harms another, they shall have to pay compensation.
- (B) If a person causes death, they shall be liable to imprisonment.
- (C) If a person drives a car at an unreasonable speed, they shall be liable to a fine.¹⁹

Legal uncertainty, in the umbrella sense of that term, exists when it is impossible to predict whether a particular set of facts will trigger a sanction with a probability of one.²⁰ For example, suppose that we are told that the law of some imaginary polity comprises the three laws above, and no others. You and I are both subject to the laws of that polity. The following events transpire: I am driving my car at 45 km/h while gesticulating at my tearful girlfriend. While this is ongoing, I run over your cow. The force of the impact is such that the cow dies on the spot. The matter winds up before a court. Before the case is decided, we cannot be sure what its outcome will be. It is possible that I will be found liable for negligence, or for killing, or fined for speeding, or a combination of the three, or that I will go home free. But it is impossible to ascribe to any one of these eventualities a probability of one. Therefore, my legal position is uncertain.

I opened with the proposition that there are two types of legal uncertainty and that the law-and-economics literature focuses on one but not the other. Let me start by describing

¹⁷ This definition is along positivist lines: see Hart (n 9) cf Fuller, L., 'Positivism and Fidelity to Law – A Reply to Professor Hart' (1958) 71 Harvard LR 630. It excludes a number of propositions which we would ordinarily dub legal. For example, the law of procedure does not indicate any sanctions – so it is not a law in the sense in which I use the term here. Rules which prescribe the conditions under a marriage or a will is valid are also excluded, for the same reason. By this exclusion, I do not mean to deny that those are laws – it is merely the case that they fall outside the ambit of the analysis which I develop.

¹⁸ English law generally does not generally recognise liability for 'pure' omissions: see *Stovin v Wise* [1996] UKHL 15 and *Smith v Littlewoods Organisations* [1987] 2 AC 241. The position is different in civilian countries: French law imposes criminal liability for failure to rescue: see Art 223-6 *Code pénal*.

¹⁹ I ask the reader to abstract, for now, from principles such as *lex certa* or the American 'void for vagueness' doctrine (*Grayner v City of Rockford* (1972) 408 US 104), which would render the last provision unenforceable.

²⁰ See Kaplow (n 1). On the possibility of the law being certain in this sense see Sunstein, C., 'Problems with Rules' (1995) 83 California LR 953. For a different interpretation of legal certainty, see Greenberg, M., 'How Facts Make Law' (2004) 10 LT 157, 162. I should note that ambiguously-worded laws are not the only potential source of uncertainty about the *outcome* of legal proceedings: an outcome might be uncertain because some facts are unknown, because it is unclear whether some evidence will be sufficient to prove the existence of a material fact, because private parties cannot gauge the quality of counsel they retain, because the identity and the ideological preferences of the judge are unknown, and so on. These may very well be related to vagueness: for example, if a law is perfectly clear, the ideology of the judge will not matter since he would enjoy no discretion. If a law is very vague, investments in legal representation may in the aggregate be higher because more depends on representation – see on this point Wickelgren & Friedman (n 1) 9. In this paper, I restrict myself to discussing only uncertainty which has to do the way in which laws are drafted.

the one which I believe to be amply covered. I call it applicative uncertainty. Suppose that I try to demystify my legal position by applying Laws A, B, and C to the facts of the case. I first check to see if I am liable to pay compensation under Law A. The word 'negligent' can mean one thing to me and quite another to someone else.²¹ It is unclear whether prosecuting a lovers' spat while driving is negligent. Some may find it too dangerous, others may tolerate it, others still may say it is perfectly acceptable or even commendable. Consequently, I cannot tell with certitude whether I will be deemed to have been negligent.

I then move on to measure my behaviour against Law B, which prohibits killing. It is not in dispute that my actions have caused a death. But there may very plausibly be disagreement as to whether the killing of cows is criminal. Does 'death' in the sanctionability condition mean the death of a human or the death of any living being? Again, sensible persons may plausibly differ on the correct interpretation. I cannot know if I am liable.

Finally, was my speed unreasonable? This again depends on an unknown: unreasonable as judged by whom, against what, to which end? A speed of 45 km/h is acceptable to many. It gives pedestrians enough time to move out of the way when a vehicle approaches. Others may find it excessive – it evidently does not give distracted drivers enough time to swerve bovines. Each interpretation being as valid as the other, it is impossible to predict whether I will be fined.

What is the common trend? In all three cases, the law is vaguer than the facts. We may say that the law and the facts exist at different levels of generality, that of the law being much higher than that of the facts.²² Applicative uncertainty arises because we cannot tell if the specific facts can be subsumed under the law. We lack information. The lawmaker has failed to provide us with enough premises to traverse the logical distance between his commands and reality.

Now, this is the very type of uncertainty which is ordinarily discussed under the rubric of rules-versus-standards. The point there is that the lawmaker can reduce the logical distance between laws and facts by producing more specific laws.²³ If, for example, the law says that 'if a person causes a death, they shall be liable to imprisonment', and then adds that 'death means the death of another human being', the additional premise makes the law less applicatively uncertain.²⁴ But the production of such additional premises

²¹ This is true of all words – see Wittgenstein, L, Anscombe, G., (tr), *Philosophical Investigations* (1953 OUP).

²² The point is at its most explicit in Boonin, L., 'The Logic of Legal Decisions' (1965) 75 *Ethics* 179.

²³ For a model of law founded on this precept, see Walker, V., 'Discovering the Logic of Legal Reasoning' (2007) 35 *Hofstra LR* 1687.

²⁴ There is a contention here, to the effect that a premise can be as vague as the law which it defines, in which case applicative certainty remains the same. This is correct, provided that the premise is also circular. For example, Section 230(1) of the Employment Rights Act defines an employee as an individual who works under a contract of employment, and then Section 230(2) defines a contract of employment as a contract of service. Since service and employment mean the same thing, the effect is that Section 230(2) does not increase the applicative certainty of Section 230(1). Note, however, that this kind of duplication is rare, since the two vague

requires the lawmaker to decide what it is that he wishes to prohibit: he must choose between a world where animals are killed and one in which they are not. To discriminate between the two alternatives, he needs information.²⁵ Information being costly, it would be uneconomic to produce a set of premises sufficient for the resolution of all legal controversies. To do so, the lawmaker would have to acquire information about all possible states of the world and then decide which ones are desirable and which ones are not.²⁶ The cost would be prohibitive. Consequently, the optimally precise law is to some extent uncertain.

I now turn to the novelty that I advertised in the introduction. Uncertainty can also be hierarchic. It may be impossible, as between two (or more) laws, to tell which one has precedence. Suppose that I have again ran over your cow while arguing with my girlfriend, but we now have the following laws:

- (A) If a person negligently harms another, where negligence includes not paying attention to the road while driving a car, they shall have to pay compensation.
- (B) If a person causes the unlawful death of another, where another means any living creature, they shall be liable to imprisonment.
- (C) If a person drives a car at an unreasonable speed, where unreasonable means in excess of 50 km/h in a city, they shall be liable to a fine.

The first point to note is that the law as it relates to the case under consideration applicatively certain. It is beyond doubt that the killing of a cow falls within the remit of the amended Law B. I am definitely liable in tort. And having driven at a speed below that indicated in Law C, I am definitely not liable to a fine.

Does this make my legal position perfectly certain? I think not. The most pressing issue to me in practice is whether the death of your cow will cause me to be jailed. This in turn depends on whether the killing of the cow was 'unlawful'. The problem is that my

laws must mean the exact same things. For example, if we are given a speed limit such as 'you must drive reasonably' and we are then told that 'reasonably means not too fast', then the two laws are obviously both vague. But the second still increases the applicative certainty of the first. Unreasonable driving can mean driving too slowly as well – the second law removes that interpretation from the possible set of interpretations, so that there are fewer possible interpretations in total, and the law becomes clearer.

²⁵ I use the term information very loosely, to denote both 'is'-es and 'oughts'. For example, in the animal-killing example, the lawmaker would probably need to discover how many persons within the polity eat animals, how many animals are slaughtered everywhere, what methods are used to slaughter them, and so on. Those are simply descriptions of reality – which is what is ordinarily meant by the word information. But to decide whether to introduce this law, the lawmaker would also have to decide how to weight the welfare of meat-eaters against the welfare of animals. He must decide whether 'humans take precedence over animals', or 'animals and humans are equal', or 'animals are more important than humans'. These statements are evaluative rather than descriptive – they do not have truth-values. I nonetheless treat them as being equivalent. The reason is that to the lawmaker, they are costly. It would be easy for a dictator to decide whose welfare he prefers, but in most modern polities the lawmaker comprises numerous individuals whose policy preferences are different. It is costly for them to coordinate, which renders evaluative statements more like descriptive ones.

²⁶ The point, or a version thereof, is made in the authorities cited at n 1. There is also a very obvious analogy with the literature on incomplete contracts: for a flavour, see Klein, B., Crawford, R. & Alchian, A., 'Vertical Integration, Appropriable Rents, and the Competitive Contracting Process' (1978) 21 JLE 297, 303.

behaviour is lawful when measured against Law C but unlawful when measured against Law A. My position, then, depends on the order of precedence between the speed limit and the negligence tort. If negligence trumps the speed limit, I go to prison; if the speed limit trumps negligence, I walk home free. But there is nothing in the text of either Law A, B, or C to suggest a ranking. The three laws are presumably equal. Therefore, one hierarchical ordering is as good as another. Accordingly, there is no way of telling whether I will go to prison. The law, even if applicatively determinate, remains uncertain.

Formally, we may define hierarchic uncertainty as the uncertainty which obtains when there are two (or more) laws which cover the same set of facts but which point at mutually inconsistent outcomes. It may arise, as in the example just discussed, when laws refer to one another. It may also exist between a positive and a negative law. Take the following dyad:

- (A) If a person expresses his view freely, they shall not be persecuted in any way.
- (B) If a person blasphemes any God, they shall be liable to a fine.

It is easy to conceive of factual scenarios in which the two clash. Suppose that I am on trial for writing a newspaper article in which I claim to be a better weaver than Pallas Athena.²⁷ My behaviour clearly falls within Law A. I am expressing a personal view. And my article is also quite clearly captured by Law B. It blasphemes the Greco-Roman pantheon. Whether I am liable does not depend on the construction of either law. It depends on the higher-order question of whether Law A is paramount to Law B. And since here there is no higher-order rule telling the judge how to choose between Law A and Law B, the outcome of my trial is uncertain.

There is a lawyerly intuition here to the effect that the uncertainty is perfectly soluble. Since guarantees on free speech are usually contained in constitutions and prohibitions on blasphemy in statutes, and since constitutions usually trump statutes, a lawyer reading the foregoing passage might instinctively favour prioritising free speech over blasphemy, even if as in the hypothetical no such law is given.²⁸ Those intuitions are well-grounded, because laws which give the order precedence of other laws are a common feature of real-world legal systems. I said earlier that applicative certainty is solved by making laws more precise. Hierarchic uncertainty is solved through metalaws. In the hypothetical, we could not predict outcomes because we did not know the order of precedence between different laws. We would be able to make ironclad predictions if we had been given laws such as ‘for the purposes of murder law, unlawful shall mean unlawful in the civil sense but not in the administrative sense’, or ‘free speech trumps blasphemy’. Note, however, that the statements to which I just adverted are not laws

²⁷ To claim that one is a better weaver than Athena is blasphemous in the Greco-Roman tradition: see Ovid, Kline, S. (tr), *The Metamorphoses* (2000 Tikaboo Pub) 273-82

²⁸ Similarly, in the first example, the legally trained are instinctively moved to apply all three norms together, even though any ordering is permissible.

under the definition I adopted at the start. They do not contain any sanctionability conditions. They are laws about laws, or metalaws.

Hierarchic uncertainty thus arises when there is no metalaw, or when the metalaw is formulated vaguely. One may ponder why a rational lawmaker might skimp on metalaws. Metalaws are costly to produce. This might on first impression appear startling – it costs little to say that the constitution trumps statute, or that more specific laws trump more general ones. But that simplicity is illusory, since before such simple determinations can be made, one also has to consider the content of constitutions and those of statutes, and the content of specific laws and their more general counterparts, and so on. A choice has to be made between laws, and to make that choice the lawmaker needs information, and that information is costly.²⁹ In the examples that I gave earlier, the lawmaker would have to decide whether in the regulation of homicide civil-law standards are more appropriate than administrative-law ones. He would also have to choose between religion and freedom of speech as social values and between unlawfulness and intent as benchmarks of criminal culpability.³⁰ Choices such as these are costly to make, information-wise. Once this feature of the problem is accounted for, it becomes apparent that it is not sensible to attempt the complete elimination of hierarchical uncertainty. Like the optimal law, the optimal metalaw is not perfectly precise.

I have discussed the optimal precision of metalaws in much more detail elsewhere. Here, I limit myself to highlighting hierarchic uncertainty as being distinct from its applicative counterpart. There are, I think, two critical differences. Firstly, applicative uncertainty only concerns the relationship between one law and one set of facts. Hierarchic uncertainty operates between one law and another. Defamation by itself cannot be hierarchically uncertain. It only becomes so once combined with the protection of free speech.

Secondly, applicative uncertainty is resolved by reducing abstraction; hierarchic certainty is achieved by increasing it. If we have the law ‘murder is the killing of another’, its applicative uncertainty is reduced by adding to it the premise ‘another means human being’. The second premise is specific to the first – the new law is more specific than the old. If we have the laws ‘free speech is guaranteed’ and ‘defamation is prohibited’, their hierarchic indeterminacy is resolved by adding that ‘free speech trumps defamation’. The latter premise is more general than the first two. The body of laws in question gains an additional layer of abstraction.

²⁹ This only holds if the choice is to be exercised meaningfully. It is possible to produce a metalaw costlessly by saying that ‘if two laws clash, the one whose text is shorter prevails’, or something to that effect. But to choose in this fashion, the lawmaker would have to be indifferent to the real-world implications of the law – which would in turn make it difficult to explain why he is producing laws in the first place.

³⁰ The problem is greatly compounded when reference is made to some changeable body of law: the lawmaker, in order to determine the appropriate hierarchy, would have to consider not only civil and administrative standards as they are at the time of setting the hierarchy, but also as they might become in the future.

III. An Example

The analysis has so far been built around hypotheticals whose realism the reader might doubt. For this reason, I will now pause for an example. I propose to discuss the rule on penalty clauses in English law. I will explain why it is uncertain, and how it can be rendered more certain. I will then proceed to consider it in conjunction with another rule. I do this in the hope of demonstrating how hierarchic uncertainty may arise and how it differs from applicative uncertainty.

One of the earliest statements of the penalty clause rule³¹ comes from *Lord Elphinstone v The Monkland and Iron Company*³². In an oft-cited dictum, Lord Halsbury described a penalty clause as a contractual provision designed to be enforced *in terrorem*.³³ For convenience, I will write this out as a sanctionability condition:

Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced *in terrorem*, the promisor will suffer no sanction under that clause.

Let me now show how that law is applicatively uncertain. I propose to do so by the reference to the facts of *ParkingEye v Beavis*.³⁴ Beavis had parked his car at a parking lot operated by Parking Eye. The contract incorporated a clause to the effect that the claimant was allowed to use the parking space for two hours. Breach of that term would trigger a charge of £85. Beavis overstayed by fifty-six minutes. He then refused to pay the charge. Parking Eye sued and at trial Beavis contended that the clause was a penalty. The law would be applicatively certain if we could match the facts of *ParkingEye* to an outcome with a probability of one.³⁵ I do not think we can. Consider first some of the possible applications of the Penalty Clause Law to the facts:

- (1) The judge may say that the charge of £85 is vastly disproportionate to the loss likely to have been suffered by ParkingEye from Beavis overstaying by fifty-six minutes, so that the clause was intended to terrorise him into compliance. In that case, Beavis is not liable.
- (2) The judge may say that the charge of £85 was intended to fund the operation of the parking lot, and although it may have had the incidental effect of scaring Beavis into compliance, that was not its main purpose. Beavis is liable.
- (3) The judge may say that although £85 is a disproportionate amount, the word 'terror' indicates a degree of fright far beyond that experienced by the average citizen when faced with a large parking charge. Beavis is liable.
- (4) The judge may say that even though £85 is a very high amount, it is possible that Beavis (or some other user) would value the right to remain at the parking lot for

³¹ By this I mean its modern version. For its origins, see Simpson, A., 'The Penal Bond with Conditional Defeasance' (1966) 82 LQR 392.

³² (1886) 11 App Cas 332

³³ *Ibid* 348.

³⁴ [2015] UKSC 67. The case was decided along with *Cavendish Square Holding v Makdessi*, and is often cited under that name.

³⁵ Of course, I base this on the assumption that we do not know the outcome of *ParkingEye* itself.

an additional fifty-six minutes at £1,000, so that they would be more than happy to pay £85. Beavis is liable.

The four interpretations are equally valid.³⁶ Each is a perfectly sensible way of measuring the facts against Lord Halsbury's dictum. We can only speculate about the choice that would be made if the facts of *ParkingEye* were to come before some particular judge. If we assume that one of the four interpretations listed here will eventually be chosen, then Beavis is liable under (2), (3), and (4). He is not liable under (1). Beavis is liable with a probability well short of 1.³⁷

How can this be fixed? The law becomes more certain if the confidence with which a prognosis can be made is increased. The elimination of possible interpretations reduces uncertainty. When only one interpretation remains, the law is certain. Suppose that the Penalty Clause Law is amended as follows:

Amended Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced *in terrorem*, where *in terrorem* means disproportionate to harm actually suffered, and where terror means any degree of fear irrespective of its severity, and irrespectively of whether terror was the sole intent of the party relying on the clause, notwithstanding the possibility that the promisor is in fact happy to pay rather than terrorised, then the promisor will suffer no sanction under that clause.

This dispenses with interpretations (2), (3), and (4), leaving only (1). We prune interpretations by saying what the word 'terror' does and does not mean, that is by defining it. The individual definitions, both positive and negative, are more specific than the word 'terror' itself.

Why might a rational lawmaker choose the original Penalty Clause Law over the Amended Penalty Clause Law? He may do so in order to economise on information costs. For example, the definition that I adopted above expressly sanctions the possibility that a promisor who valued the benefit from breach more highly than the penalty will nonetheless be able to escape sanction. It is unclear whether this is desirable. In order to decide whether it is, the lawmaker must inform himself of the relevant aspects of the

³⁶ It is probably not difficult to think of more than four interpretations. But since parking charges can only hold so much fascination, I limit myself to the ones in the main text. For the purposes of my argument, it is entirely sufficient that there exists at least one interpretation under which Beavis is liable and at least one under which he is not.

³⁷ If the four interpretations that I set out were exhaustive and each was as likely to be chosen at trial as the other, he would be liable with a probability of 0.75. This is of course a very crude way of calculating legal uncertainty: in reality, there will be many other factors involved – see n 20 above. And I do assume that the interpretations that I have set out here are the only possible ones, which is very likely not true in practice. This does not, I think, detract too much from the utility of the example – I merely assume that we are given no other information other than that in the example. I do this to show how the particular types of uncertainty may be reduced, and what the interplay between the two is – those connections would be more obscure in a more realistic example.

problem, its prescience in society, and so on.³⁸ Acquiring such information is costly. The instances in which promisees value the use of parking lots at more than £85 are rare. The outlay in information is wasteful. It would have been better to keep the law vague.

So much for applicative uncertainty. What I propose to do now is take Lord Halsbury's *in terrorem* dictum in conjunction with Lord Dunedin's pronouncement in *Dunlop Pneumatic Tyre v New Garage and Motor Company*³⁹. There Lord Dunedin said that a clause is enforceable if it stipulates liquidated damages, that is, some realistic estimate of the loss likely to be suffered by the promisee. The dictum in full reads thus:

'The essence of a penalty is a payment of money stipulated as *in terrorem* of the offending party; the essence of liquidated damages is a genuine covenanted pre-estimate of damages'⁴⁰

As before, I will formulate the law as a complete sanctionability condition, and I will consider it in conjunction with that announced in *The Monkland and Iron Company*:

Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced *in terrorem*, the promisor will suffer no sanction under that clause.

Liquidated Damages Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be a genuine covenanted pre-estimate of damages, then the promisor will be sanctioned as per the provisions of that clause.

Here one law defines a positive sanctionability condition and the other a negative. The Liquidated Damages Law points to enforceability, the Penalty Clause one to invalidity. The two overlap. A law can be designed to be enforced *in terrorem* while being a genuine pre-estimate of damages. Suppose that we modify the facts of *Parking Eye* slightly, so that the claimant can prove that £85 is a commercially justifiable estimate of its loss, say because even though its loss from individual infractions is small, its aggregate expenditure on administering and enforcing the system is large. At the same time, for the drivers who do get caught, an £85 fine may be said to be *in terrorem*, say because average earnings in the area are £200 a week. The controversy then turns on whether the Penalty Clause Law takes precedence over the Liquidated Damages Law, or vice versa. There are two possible orderings:

(1) The Penalty Clause Law applies only when it is consistent with the Liquidated Damages Law, in which case the parking charge clause is enforceable.

³⁸ For an accessible overview of that debate, see Mattei, U., 'The Comparative Law and Economics of Penalty Clauses in Contracts' (1996) 43 AJCL 427

³⁹ *Dunlop Pneumatic Tyre v New Garage and Motor Company* [1915] AC 79.

⁴⁰ *New Garage* (ibid) 86, citing *Clydebank Engineering & Shipbuilding v Don Jose Ramos Yzquierdo y Castaneda* [1905] AC 6. The phrase 'genuine covenanted pre-estimate of damages' denotes the idea that the parties foresaw the sum in question as a compensation of loss actually likely to be suffered, rather than as a penalty that one would have to pay to the other in the event of breach. There is a loose analogy between this and the distinction between compensatory and punitive damages: if the sum was contemplated as compensation, it is valid; if it is punitive, it is not.

(2) The Liquidated Damages Law applies only when it is consistent with the Penalty Clause Law, in which case the parking charge clause is unenforceable.

We do not know if ordering (1) or (2) is correct. Without a metalaw, the uncertainty is irreducible. The outcome becomes a matter for the individual judge. The lawmaker may resolve the problem by formulating a metalaw, such as:

Metalaw: Where two laws clash, that which points to validity shall prevail.

This serves to eliminate ordering (2). The law becomes certain. Might a rational lawmaker have good reason not to produce such a metalaw, or to produce a vague one, such as ‘where two laws clash, that which points to validity shall *usually* prevail’? In order to commit himself to a specific metalaw, the lawmaker must also make a choice between the sanctity of contracts and the protection of parties with asymmetric bargaining power. Choosing between the two entails an investment in information. Making a choice is not costless – the lawmaker would have to decide whether he wants the court to upset contracts more often. He would have to study the potential economic impact of one solution or the other, its fairness implications, the availability of mechanisms for circumventing the prohibition, their cost, and so on. The evaluation, and the acquisition of the germane information, have a positive cost. The cost of information will sometimes preclude the lawmaker from specifying a metalaw. Therefore, the optimal metalaw will sometimes be less than perfectly specific.

I said that applicative and hierarchic uncertainty differ in two respects, namely origin and solutions. Regarding the former, recall that when I was discussing the Penalty Clause Law in isolation, a problem arose because the facts of *Parking Eye* were specific and the Penalty Clause Law vague. The two could not be rendered commensurate. The Penalty Clause Law and the Liquidated Damages Law, on the other hand, are problematic because they coexist. If there had been no Liquidated Damages Law, there would have been no need to rank it against the Penalty Clause Law, and vice versa.

As regards solutions, recall that we made the Penalty Clause Law applicatively certain by adding further premises that were specific to the pre-existing ones. We solved hierarchic uncertainty in the two-law example by introducing a metalaw. The metalaw was more general than both laws. If at first a body of law contains a Penalty Clause Law and a Liquidated Damages Law and later that same body of law has those two and then the Metalaw, we may say that the body of law in question has become more, rather than less, abstract.

IV. The Relationship between Applicative and Hierarchic Indeterminacy

I now want to try to postulate a relationship between applicative and hierarchic uncertainty. As legal complexity increases, applicative uncertainty decreases and hierarchic uncertainty increases. I will first say what I mean by complexity. Thereafter, I will examine its connection with hierarchic and applicative uncertainty. Lastly, I will proffer some very general arguments about the shape and structure of the optimal system.

The word ‘complexity’ in general parlance denotes complicatedness. It might not be immediately obvious why I associate it with lower applicative uncertainty. The reason is that I use the term in a somewhat more technical sense. Complexity here denotes the existence of several elements within a system which interact with one other.⁴¹ Since we are here concerned with laws, we may say that a legal system is complex when it comprises multiple laws that relate to one another. This definition is meaningless in a static sense. All bodies of law comprise more than one element and those elements always relate to one another, so all law is complex. I however use the term dynamically: a legal system becomes more complex if the number of elements that comprise it increases and less complex when that number decreases.⁴²

I now return to the proposition that if complexity increases, applicative uncertainty decreases and hierarchic uncertainty increases. We may say that if the number of laws within a body of law increases, each individual law will become easier to apply, but the laws in their totality will become more difficult to systematise, that is, it will become more difficult to decide which law to apply to any particular set of facts. Recall the hypothetical in which I ran over your cow while arguing with my girlfriend. I referred to two versions of a negligence law, one determinate in respect of those facts and the other indeterminate.

Indeterminate Law: If a person negligently harms another, they shall have to pay compensation.

Determinate Law: If a person negligently harms another, *where negligence means not paying attention to the road while driving a car*, they shall have to pay compensation.

The italicised part specifies the law. It also increases that law’s complexity: where before we had only a law, we now have a law and a premise. We may equally say that we have two laws, one which says that negligence triggers compensation and another that negligence includes not paying attention to the road.⁴³ It may be thought that the

⁴¹ For a more detailed exposition see Simon, H., ‘The Architecture of Complexity’ (1962) 6 *Proceedings of the American Philosophical Society* 467.

⁴² Consider a fictional legal system which comprises one law - ‘civil wrongs shall be compensated’ - and the *Bürgerliche Gesetzbuch*, which makes the same point in 2385 Articles, many of which have sub- and sub-sub-clauses. We may say that the former statement is complex, in that it comprises two elements – civil wrongs and compensation. And evidently, so is the BGB. But the BGB is more complex than the original statement, plainly because it comprises many more elements. The reader might still be sceptical, so far as this might be taken to imply that there is a straightforward relationship between the number of Articles in some statute, here the BGB, and its complexity. Recall, to this end, that a ‘law’ in my taxonomy denotes a sanctionability condition. Of those a single Article might contain several or none. That the BGB has 2385 Articles does not mean that it contains exactly 2385 sanctionability conditions, or ‘laws’. All that I mean to suggest is that if a further ten Articles are added to the BGB, there is at the very least a positive probability that the total number of sanctionability conditions in the BGB will increase by at least one. If this is right, then its complexity – in the sense of that term which I adopt here - would likely increase. If this is thought wrong, then it may also be said that the number of laws in a given corpus of law is a good *proxy* for its complexity. Then, my conclusions are only valid in instances in which this assumption too holds. I suspect that, even in this weaker version, this would still include a great many legal rubrics.

⁴³ In the examples I use in this paper, I take a somewhat cavalier attitude to the issue of whether something is ‘one’ or ‘two’ laws. This is so because the point is purely semantic, and does not, I think, impact on the veracity of my conclusions. Let me take an example I used earlier – suppose that blasphemy is an offence and also that

Determinate Law here is perfectly certain - it is so when it is measured against the facts that I used before. But let us suppose that another case comes to trial in which your neighbour's cow was mowed down by my neighbour, who was having a heart attack while driving. We now have hierarchic uncertainty between the law and the premise. The law dictates that negligent behaviour should be sanctioned. No-one would say that a person who is having a heart attack is negligent for failing to watch the road.⁴⁴ But the premise defines negligence as failure to watch the road. The facts fulfil that condition.

Perhaps it is helpful to rewrite the Determinate Law as two laws:⁴⁵

(A) If a person negligently harms another, they shall have to pay compensation.

(B) If a person fails to pay attention to the road, they shall have to pay compensation.

The two laws define sanctionability conditions, but their interrelationship is unclear. It might be that (A) and (B) have to be satisfied for there to be liability, or that (A) or (B) will suffice, or (A) so far as it is consistent with (B), or (B) so far as it is consistent with (A). There being no metalaw, we cannot predict the outcome. Generalising, we may say that when we specify a law, we add more words to it. Since those words are vague, they overlap with the words we used before. The more we add, the greater the overlap, and the greater the resultant uncertainty.

I have so far striven to show that applicative certainty translates into hierarchical uncertainty. I have not said anything of the magnitude of the problem. It could be that a small increase in complexity brings marginal gains in applicative certainty while greatly

freedom of speech is guaranteed. We may formulate this like two laws, like I did before, and speak of hierarchic indeterminacy. We may also formulate the two provisions as a single law, such as 'Freedom of speech is guaranteed and blasphemy is prohibited'. The reformulation does not get rid of the hierarchic indeterminacy: we still do not know what happens if something is an exercise of free speech which is also blasphemous. I said that what is needed to disambiguate the two provisions is a metarule, such as 'free speech trumps blasphemy'. That can be incorporated into a single law too: 'Blasphemy is prohibited, except when it constitutes an exercise in free speech'. Or it can be formulated as three laws: 'Law 1: Blasphemy is prohibited', 'Law 2: Free speech is guaranteed', 'Law 3: Law 2 trumps Law 1'. The effect, as far as prognoses about case outcomes are concerned, is exactly the same. It is for this reason that I have not adopted any particular method of distinguishing between separate laws here. This is generally mimicked in the way lawyers speak of legal doctrines. For example, an English lawyer might describe 'the law of murder' as comprising the elements of the offence and defences such as diminished responsibility. Or he might describe 'the law of diminished responsibility' which includes elements such as substantial impairment, rational judgment, and self-control. In the former case, 'murder' is treated as one law. In the other, it is treated as being separate from defences. In both cases, the classification makes no difference, so long as we are equipped with a metarule – in this case, that diminished responsibility trumps murder but not manslaughter.

⁴⁴ This to some extent mirrors the argument in n 20. The difference is that Sunstein argues that to hold the stroke victim liable would be absurd, and this would make the law uncertain. My point is that even if we accept this absurdity and proceed to convict, the law will still be uncertain – the goal of perfect applicative certainty not only produces absurdity, but it also fails to guarantee that the law will become entirely certain.

⁴⁵ The reader might suspect simulation: to make my point, I transform one law into two. Is there any artifice involved? This would be true if there is some fundamental difference between the meaning of 'if negligence then compensation, where negligence means failing to watch the road' and the meaning of 'if negligence then compensation; if failing to watch the road then compensation'. The only difference in fact is that the first formulation conceals the hierarchic indeterminacy through syntax: the clause 'where' introduces the premise, but it does not make clear its relationship with the law – does 'where' mean 'if' or 'if and only if' or 'and' or 'or'.

amplifying hierarchical uncertainty. Or it might be that the gains in applicative certainty are large and the loss of hierarchic certainty negligible. My argument in this respect is that hierarchic uncertainty can be expected to rise very dramatically with every additional law, whereas investments in applicative certainty are likely to exhibit diminishing returns.⁴⁶ And this will eventually lead me to the proposition that for the system to be able to sustain complexity, the lawmaker must produce very precise metalaws.

It is best to begin by considering a metalaw-free system. Recall that hierarchic uncertainty arises when we are given some laws, but not their order of precedence. The probability that a particular ordering will govern in a case is given by dividing one by the number of possible orderings. And the number of possible orderings, absent metalaws, depends on the number of laws that can potentially be applied to a given case. If we are given one law, there is hierarchic certainty. If we are given two laws, A and B, they can be ordered as either A-B or B-A. Any prediction about their likely order of precedence is true with a probability of 0.5. If we are given three laws, A, B, and C, then there are six potential orderings – A-B-C, A-C-B, B-A-C, B-C-A, C-A-B, C-B-A. Any prediction is true with a probability of 0.16. If we are given four, the number of orderings rises to twenty-four, giving a probability of 0.04. Five laws can be ordered in one-hundred and twenty ways, and so on and so forth. The number of potential orderings is the factorial of the number of laws.

Let us now consider the position with metalaws. With perfectly precise metalaws, there would be no hierarchic uncertainty – the lawmaker’s desired ordering would always be known in advance. A set of perfectly precise metalaws would be very expensive to produce – the lawmaker would have to anticipate every case in which two or more laws might overlap, and he would have to choose between these alternatives laws for each set of facts that he identifies. A vaguer metalaw will say that one ordering will govern with some probability p and others will govern with a probability $1 - p$.⁴⁷ What becomes

⁴⁶ The point is this: to make the law more applicatively certain, the lawmaker must invest in information. For example, it is informationally cheap to say ‘drive reasonably’ – the lawmaker must only know that there are some dangers from unreasonable driving. It is much more expensive to say ‘drive at a speed lower than 50 km/h’. This requires the lawmaker to enumerate the dangers from driving quickly, to balance them against the inconvenience from slower transportation, and to strike a balance between the two. Returns diminish because the reduction in applicative uncertainty becomes smaller with every additional clarification: we gain a lot in terms of prognostics from switching from ‘driving reasonably’ to ‘driving under 50 km/h’, but less from switching from ‘drive under 50 km/h’ to ‘drive under 50 km/h in cities unless near a school, when you should drive at 30 km/h’, less still if we switch from ‘drive under 50 km/h in cities unless near a school, when you should drive at 30 km/h’ to ‘drive under 50 km/h in cities unless near a school, when you should drive at 30 km/h or unless visibility is poor, when you should drive at 20 km/h’. In each step, applicative uncertainty decreases – more and more facts are brought within the scope of the law. But the decrease is in each step smaller than in the previous – hence the point that investments in information exhibit diminishing returns.

⁴⁷ Real-life metalaws do not, of course, tie the application of one law or another to probabilities. For example, in precedential systems, we are told that (A) previous decisions of the courts are binding, unless there is a good reason to depart from them, and (B) if statute and precedent clash, statute prevails. (A) is a vague metalaw: it establishes a presumption that previous judgments are binding, but that presumption can be rebutted ‘when it is right to do so’ (*Practice Statement* [1966] 3 All ER 77). Since the criterion for departure is vague, we may say

critical, then, is the probability that the default ordering will apply – the lower its value, the sharper the decrease in hierarchic determinacy for every additional law.

Now consider applicative certainty. For every additional law, applicative uncertainty decreases. The question is by how much. The literature on applicative certainty suggests that the process exhibits diminishing returns.⁴⁸ If the most general law is ‘negligence then compensation’, then specifying this through ‘negligence includes not paying attention to the road’ makes the law considerably more certain. But if we then go on to specify this further to say that ‘not paying attention to the road includes driving with one’s eyes closed’, the gain is smaller: the second clarification prunes fewer interpretations than the first.

What, then, is the optimal number of laws? Recall that every additional law decreases applicative uncertainty but it increases hierarchic uncertainty. Therefore, we may only increase the number of laws up to the point where the loss of hierarchic certainty exceeds the corresponding gain in applicative certainty. Beyond that point, further specification will result in a gain in applicative certainty which is lower than the corresponding loss of hierarchic certainty, causing uncertainty, in the aggregate, to increase rather than decrease. Accordingly, increasing complexity beyond that point will be counter-productive. In mathematical terms, if we were to plot applicative and hierarchic certainty as functions of the number of laws, then the optimum point would be the intersection of the two curves.

that the presumption will govern with a probability of p and the exception with a probability of $1 - p$. (B) on the other hand is precise: statute *always* prevails. Neither metalaw speaks directly of probabilities. But for both, it is possible to say that the application of a particular law is specified with some probability, and also that that probability varies between the two metalaws.

⁴⁸ The point is at its most explicit in Ehrlich & Posner (n 1) and Korobkin (n 1). It might appear that there is a counter-argument to the effect that as refinements and exceptions are introduced to some general standards, it becomes harder for the judge to determine whether the case falls under the standard or under its exceptions. For example, we may at first have a law which prohibits driving at a speed in excess of 50 km/h, and thereafter we may introduce an exception to the effect that necessity is a defence to a charge of speeding. Once the necessity defence is introduced, there is the possibility that counsel in most cases will argue that the defendant needed to speed. The point is made at length in Sunstein (n 20). It does not refute my point here for one of two reasons. Firstly, on my framework the introduction of the necessity defence simply makes the law more hierarchically uncertain, and the loss of hierarchic certainty outweighs the gain in applicative certainty. We do know something which we did not know before, namely that the limit is subject to a defence, but we also face the problem of the offence and the defence overlapping. If this is not accepted, then it is also possible to say that the necessity defence increases the cost of litigation rather than uncertainty: as cases are decided, it will become apparent what ‘necessity’ means, and once there is clarity, the defence will only be pleaded where it has a realistic chance of success. Litigation around that point will of course be costly – but the cost of litigation is not the same as the cost of information to the lawmaker.

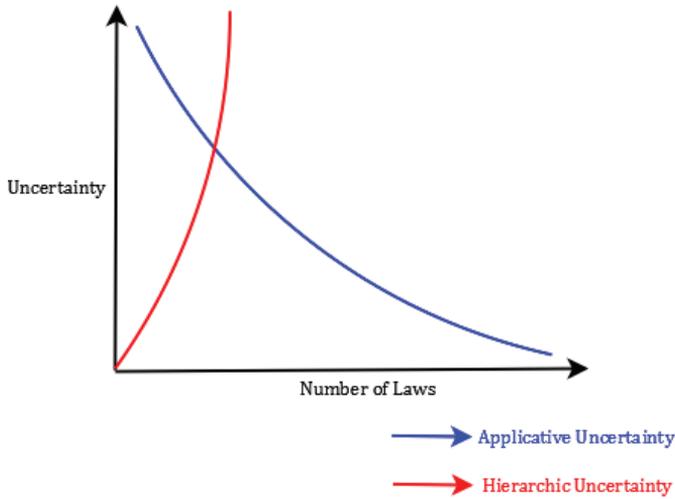


Figure 2: The Relationship between Applicative and Hierarchic Uncertainty

Now, without metalaws hierarchic uncertainty rises factorially. The decline in applicative uncertainty is not so sharp. We may therefore expect that the optimal number of laws would be very low. A very abstract law would be preferable to a very specific one. The reader may validly ponder how it is possible, then, for real legal systems to be as complex as the *Bürgerliches Gesetzbuch* or the common law of property. I refer back to the discussion of metalaws – the slope of the hierarchic certainty curve is influenced by the probability with which a metalaw designates one ordering as being valid. If the metalaw is very certain, that is, if it designates some ordering as being valid with a very high probability, the law can be very complex. Two possibilities then emerge – either modern legal systems are radically indeterminate, that is, the outcome of any one case is entirely a matter for the judge⁴⁹, or they contain very precise metalaws.⁵⁰

I believe the latter to be true, if anything as a matter of empirics. German justice is predictable because the BGB contains a rigid hierarchy. The same is true of the common law of property. Given the high number of laws in real legal systems and the fact that hierarchic uncertainty rises at a factorial rate, a very small change in the precision of the

⁴⁹ That would be the legal realist interpretation: see Kennedy, D., 'Form and Substance in Private Law Adjudication' (1976) 89 Harvard LR 1685.

⁵⁰ I should make a clarification here. Firstly, I do not claim that any law is hierarchically indeterminate when set against another. If we say that speeding triggers a fine and also that playing loud music at night is prohibited, the two are hierarchically determinate because speeding cannot constitute playing loud music, and vice versa. Likewise, it is impossible to conceive of a factual situation in which all of the *Bürgerliches Gesetzbuch's* 2385 Articles are potentially applicable, or of a case which requires the application of every single rule of the common law of property. My argument is only that every law is applicable to a case with some probability. Consequently, as the number of laws in a given set increases, so does the expected number of laws which are applicable to individual cases.

metalaw can have a tremendous impact on aggregate certainty. Metalaws, if I am right, set the boundaries of legal complexity.

V. A Second Example

I will now try to illustrate this theoretical point. I will begin with a very brief history of the development of the liquidated damages rule in the last century. I will then show how the various points raised in the preceding section apply to it. Let us take as our starting point the dicta of Lord Dunedin and Lord Halsbury in *Dunlop* and *Monkton* respectively. The reader will recall that I formulated these as two laws, namely:

(T0) Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced *in terrorem*, the promisor will suffer no sanction under that clause.

Liquidated Damages Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be a genuine covenanted pre-estimate of damages, then the promisor will be sanctioned as per the provisions of that clause.

In *Cooden Engineering v Stanford*⁵¹, a car hire-purchase agreement provided that breach would entitle the claimants to repossess the car *and* to all outstanding instalments. The claimants argued that this was justified because the defendant Stanford had only paid eight instalments out of twenty-four that had been due. Lord Somervell rejected the argument. He was of the view that the determination of validity ought to be made at the time of contracting. The defendant's actions after the contract had been signed could not be used to show that the clause was not penal.⁵² Let us now rewrite the laws above to incorporate this proposition:

(T1) Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced *in terrorem*, *where the operation of the clause is to be judged at the time at which the contract was made*, the promisor will suffer no sanction under that clause.

Liquidated Damages Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be a genuine covenanted pre-estimate of damages, *where the operation of the clause is to be judged at the time at which the contract was made*, then the promisor will be sanctioned as per the provisions of that clause.

In *Campbell*,⁵³ the claimants argued that the disputed clause was not penal because the contract described it as 'agreed compensation'. They also argued that the defendant could not have felt any actual terror upon breaching. On the first point, Lord Racliffe said that 'the intention of the parties themselves is never conclusive and may be overruled or

⁵¹ [1953] 1 QB 86

⁵² *ibid* 94

⁵³ [1962] AC 620

ignored if the court considers that even its clear expression does not represent 'the real nature of the transaction' or what 'in truth' it is to be taken to be.⁵⁴ On the second, his Lordship pointed out that 'penalties may quite readily be undertaken by parties who are not in the least terrorised by the prospect of having to pay them and yet are, as I understand it, entitled to claim the protection of the court when they are called upon to make good their promises.'⁵⁵ Two additions were thus made to the law:

(T2) Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced in *terrorem*, *where in terrorem does not mean actual terror or fear* and where the operation of the clause is to be judged at the time at which the contract was made, *irrespective of the description which the parties give to it*, the promisor will suffer no sanction under that clause.

Liquidated Damages Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be a genuine covenanted pre-estimate of damages, where the operation of the clause is to be judged at the time at which the contract was made, *irrespective of the description which the parties give to it*, then the promisor will be sanctioned as per the provisions of that clause.

Then came *Imperial Tobacco*.⁵⁶ There, Lord Wright observed that 'a millionaire may enter into a contract in which he is to pay liquidated damages, or a poor man may enter into a similar contract with a millionaire, but in each case the question is exactly the same'.⁵⁷ From this dictum we may distil the proposition that the wealth of the parties does not enter into the *in terrorem* test.

(T3) Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced in *terrorem*, where in *terrorem* does not mean actual terror or fear and where the operation of the clause is to be judged at the time at which the contract was made, *irrespective of the description which the parties give to it and irrespective of their wealth*, the promisor will suffer no sanction under that clause.

Liquidated Damages Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be a genuine covenanted pre-estimate of damages, where the operation of the clause is to be judged at the time at which the contract was made, *irrespective of the description which the parties give to it*, then the promisor will be sanctioned as per the provisions of that clause.

In *Murray v Leisureplay*⁵⁸, the defendants argued that a provision guaranteeing a year's salary to its director in the event of dismissal was a penalty clause – it made them afraid

⁵⁴ Ibid 622

⁵⁵ Ibid

⁵⁶ *Imperial Tobacco of Great Britain and Ireland v Parslay* [1936] 2 All ER 515

⁵⁷ Ibid 523

⁵⁸ [2005] IRLR 946

to dismiss him. That argument was rejected because the clause was ‘commercially perfectly justifiable’.⁵⁹

(T4) Penalty Clause Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be enforced in *terrorem*, where in *terrorem* does not mean actual terror or fear and where the operation of the clause is to be judged at the time at which the contract was made, irrespective of the description which the parties give to it and irrespective of their wealth, *whereas a clause which is commercially justifiable is not designed to be enforced in terrorem*, the promisor will suffer no sanction under that clause.

Liquidated Damages Law: If a promisor and a promisee enter into a contract and that contract contains a clause which is designed to be a genuine covenanted pre-estimate of damages, where the operation of the clause is to be judged at the time at which the contract was made, irrespective of the description which the parties give to it, *where genuine covenanted pre-estimate means a commercially justifiable provision*, then the promisor will be sanctioned as per the provisions of that clause.

Finally, let us consider the case of *ParkingEye*. There, the Supreme Court held that the law had become too entangled and formulated a new approach. Lord Mance, with whom the rest of their Lordships agreed on this point, said that whether a clause is enforceable depends on ‘whether the sum or remedy stipulated as a consequence of a breach of contract is exorbitant or unconscionable when regard is had to the innocent party’s interest in the performance of the contract’⁶⁰. We may formulate the resultant law thus:

(T5) Enforceability Law: If a promisor and a promisee enter into a contract and that contract contains a clause which stipulates an exorbitant or unconscionable remedy, where exorbitance and unconscionability are to be measured against the innocent party’s interest in performance, then the promisor shall suffer no sanction under that clause.

I now come to the substantial points. I will discuss T0-T4 first, since there is a rather obvious pattern, and then I will speak of T5, in which that pattern is reversed. Firstly, between T0 and T4, the law becomes increasingly complex. At each step, a new element is added to the ones already present. A rather simple way of grasping this is to evaluate the position of a person minded to familiarise herself with the law of penalty clauses at T0 and at T4. Their task would obviously be much more laborious at T4.

Secondly, I argued previously that as complexity increases, so does applicative certainty. We may, at T0, ponder whether a person who was perfectly secure in his future when he made a contract but was reduced to fright at the time of breach would be able to escape the provision. At T1, we know that this is not the case – a further set of facts has been brought within the core of the provision. Likewise, we may at both T0 and T1 wonder

⁵⁹ Ibid at para [14], citing Lord Woolf in the Privy Council case *Phillips Hong Kong v AG of Hong Kong* (1993) 61 BLR 49, 58-9.

⁶⁰ *Parking Eye* (fn 34) para 255

whether the fact that the parties describe something as compensation matters – at T2, we know that wording and indeed mentation are irrelevant. At T0, T1, and T2 we do not know whether the parties’ wealth makes a difference, but at T4 we know to disregard it. In Hartian terms, with each step the core of the provision expands and its penumbra shrinks.⁶¹

Thirdly, I contended earlier that specification exhibits diminishing returns. We may say that this is true if the totality of facts brought within the core of the provision between T0 and T1 is larger than that brought within its core between T1 and T2, and that one is larger than that between T2 and T3, and so on. Does this hold here? I believe so.⁶² The temporal qualification in T1 has the effect of reducing uncertainty a great deal. A clause may be *in terrorem* at some times between breach and suit and not in others. A huge number of interpretations are possible at T0. At T1, all but one are rendered obsolete – the time of the determination is fixed. Between T3 and T4, conversely, we know quite a lot about what a penalty clause is– there remains only a small residue of cases in which a commercially sound clause may still be thought to potentially contravene the rule. That issue is clarified by the T4 law, but the gain in certainty is surely lower than that between T0 and T1.

It would appear that the T5 law makes the law less certain than it was at T4 – there is an obvious reduction in complexity. The gains made between T0 and T4 are reversed. If, for example, we try to apply the T5 law to a situation in which the parties have described their agreement as ‘agreed compensation’, there is nothing in its text to guide us. Does this mean that T5 is sub-optimal? I think not. Although the law at T4 is very certain applicatively, it is also very uncertain hierarchically. How so? Even at T0, we do not know what happens when a clause is simultaneously *in terrorem* and a genuine pre-estimate of loss. Let us now add to this the T4 provisos that a clause which is *in terrorem* cannot have

⁶¹ Hart (n 21) 607.

⁶² I cannot, however, show this conclusively. To do so I would have to draw up a complete list of possible interpretations and discuss the applicability of each – in other words, I would have to deliver a complete representation of all possible states of the world. Information costs prevent me from doing this as much as they do the lawmaker. I nonetheless think that the argument has some intuitive appeal. One counterargument which has been put to me is that if facts such as those of *Murray* had come to be decided before those of *Cooden*, then the position would be reversed: a greater gain in applicative certainty would be made at a later stage. It is possible to argue that had the facts of *Murray* come before the courts first, there would have been argument made by counsel about the time at which a clause ought to be assessed. This is of course speculative. Even if it is not accepted, there is also an argument from the law-and-economics literature to the effect that the more (applicatively) uncertain the law, the likelier it is to be litigated: see for example Dari-Mattiaci, G. & Deffains, B., ‘Uncertainty of Law and the Legal Process’ (2007) 163 JITE 627. The idea, summarised, is that if parties have the same expectations about the outcome of a lawsuit, they will always settle, since to settle is cheaper than it is to litigate. Consequently, litigation occurs because of the divergent expectations about outcomes. The more uncertain the law, the higher that divergence, and the greater the likelihood that the parties will litigate. Thus a highly uncertain law – such as one that prohibits penalty clauses but does not fix a temporal reference point for that determination – will attract much litigation, whereas a law that does provide for such a temporal reference point but not for commercial justifications will attract less. This is of course a *ceteris paribus* argument, so that exceptions will exist, but in general it might be expected to hold.

been commercially justifiable and that a genuine pre-estimate of loss is commercially justifiable.

Law 1: An *in terrorem* clause is unenforceable.

Law 2: A genuine estimate of loss is enforceable.

Law 3: A commercially justifiable clause is enforceable.

Like at T0, we do not know what happens if a clause is *in terrorem* and a genuine pre-estimate. But to this Law 3 adds further perplexities. For instance, what happens if a clause is *in terrorem*, not a genuine pre-estimate, but it is commercially justifiable? The introduction of a third law expands the set of possible orderings. Recall that with two laws, there were two possible orderings. With three laws, we have six:

- (1) If a clause is *in terrorem*, it is unenforceable, irrespective of whether it is a genuine estimate or commercially justifiable.
- (2) If a clause is a genuine preestimate, it is enforceable, irrespective of whether it is a *in terrorem* or commercially justifiable.
- (3) If a clause is commercially justifiable, it is enforceable, irrespective of whether it is a genuine estimate or *in terrorem*.
- (4) If a clause is a genuine preestimate and commercially justifiable, it is enforceable, irrespective of whether it is *in terrorem*.
- (5) If a clause is *in terrorem*, it is enforceable if it is commercially justifiable but unenforceable if it is a genuine pre-estimate.
- (6) If a clause is a genuine preestimate, it is enforceable if it is commercially justifiable but unenforceable if it is *in terrorem*.

Since there is in our setup nothing to say that one of (1), (2), (3), (4), (5) and (6) is to be preferred, each is as likely to be taken up by a judge as any other. At T4, therefore, any one prediction is likely to be correct with a probability of 16.66% - a third of the confidence which we may have had at T0, where any prediction would have been true in 50% of cases.

Once applicative and hierarchic uncertainty are considered together, the legal change between T4 and T5 actually makes the law more certain. Why so? Suppose that under the simple T5 law, we know whether it applies to some facts with a probability of 20%, and under the complex T4 one, that certainty is 90%. At T4, we only know what the applicable ordering is with a probability of 16%. At T5, that probability is 1. Therefore, the compound probability of a prognosis being true under the complex T4 law is 0.9×0.16 , which gives 0.14. Under the simple T5 law, it is 0.2×1 , or 0.2. The T5 law is more certain in the aggregate, even on the wildly unfavourable assumption that it is three times as applicatively uncertain as the T4 law.

Lastly, consider the role of metalaws. There are several that apply here: earlier High Court judgments bind future High Courts absolutely, the Court of Appeal cannot depart from its

own case law⁶³, House of Lords or Supreme Court judgments bind all courts bar the highest but not Parliament, and the highest court can only depart from its own case law 'where it is right to do so'.⁶⁴ All of these metalaws are much more abstract than the rules contained in the cases themselves: the Supreme Court's case law includes not only *ParkingEye* but also judgments on contract damages, human rights, the rule on perpetuities, and the royal prerogative. The metalaw which tells us what happens when the Supreme Court's case law clashes with that of other courts is much more general than any individual rule contained in that case law.

How do these metalaws keep the system coherent? I said earlier that between T0 and T4, there emerged three laws which could be hierarchically arranged in six different ways. Without the set of metalaws I just described, the number of possible orderings would have been considerably higher: in every case, the judge would be free to disregard previous judgments and introduce interpretative principles of her own. Moreover, the T5 judgment would not reduce hierarchic uncertainty, since there would be no metalaw to indicate that if *ParkingEye* is at odds with any previous authorities, it is the former that prevails. Note, however, that the metalaws in place are not perfectly certain: the Supreme Court in *ParkingEye* was authorised to depart from the previous case law because it was 'right to do so'. But no-one could have predicted whether it would be right to depart from the previous case law before the case came before the Supreme Court. In other words, before *ParkingEye* was decided, any prediction of its outcome would have had to account for the possibility that it would be 'right' for that court to depart from precedent.⁶⁵ Thus in the last analysis, it is metalaws that fix the boundaries of legal prediction: what is known is knowable because there are metalaws, and the unknown is unknown because those metalaws are not perfectly certain.

VI. Conclusion

My purpose here was to reframe an old problem, rather than to solve it. It is nonetheless possible to synthesise the main points. Firstly, there are two types of legal uncertainty. One comes from the vagueness of laws. The other has to do with the relationship between laws. Although their cause is the same – the scarcity of information – the solutions come in different forms. Applicative uncertainty is reduced by introducing more specific laws, hierarchic uncertainty through more abstract ones. There is a tension between the two, and a balance to be struck – so long as information remains costly, the law must remain partly uncertain. Secondly, once we account for hierarchic uncertainty, it becomes

⁶³ *Young v Bristol Aeroplane* [1944] KB 718

⁶⁴ *Practice Statement* (n 31)

⁶⁵ The same is true of the metalaws that govern between T0 and T4, albeit in a more subtle way. The reason those are hierarchically uncertain is that there is a metalaw that permits the judiciary to *distinguish* between cases and also another that prohibits them from overruling previous judgments. Since distinguishing is a form of lawmaking – see for example Kelsen (n 3) 77 and Raz (n 5) 94-101 – it is inevitable that there will be a tension between the distinction and the law as originally promulgated. The problem is that although there is a metalaw which permits the British judiciary to distinguish cases, there is no indication in that metalaw of when distinguishing is permissible and when it is not.

obvious why in law structure matters: metalaws keep the system coherent. Without them, we would be unable to have anything but the most general laws.

Chapter IV

ECONOMICS OF THE FACT-LAW DISTINCTION

Anglo-Saxon law distinguishes between questions of fact and questions of law. Presently, I will try to show that the distinction, which is called bifurcation, has an economic rationale. The point may be of interest for two reasons. Firstly, bifurcation has thus far escaped the attention of law-and-economics scholars.¹ It will be seen that the black-letter lawyer's distinction between facts and law bears a very intimate connection to the law-and-economics scholar's distinction between rules and standards. Under a standard, many questions are for the trier of fact. Under a rule, that trier's role is more limited. Secondly, in the general literature bifurcation is portrayed as something of an anachronism, a remnant of the time when Anglo-Saxon trials were dominated by lay triers of fact.² The jury having fallen into disuse,³ it might appear that bifurcation solves a problem we no longer have. If I am right, that impression is misleading – bifurcation in our day exists to delineate discretionary and non-discretionary matters. And in doing this, it allows the system to strike a balance between the cost of information and that of legal uncertainty.

The argument, put at its most succinct, is this: to make laws, we need information. It is impossible, or at any rate uneconomic, to determine the desirable outcome of every instance of adjudication in advance. For this reason, some matters are left to the discretion of the judge. How that discretion will be exercised, however, is unpredictable. We face a trade-off. If too much is left to the judge, the law becomes too applicatively uncertain; if too much is left to the lawmaker, writing laws becomes too costly. Bifurcation designates some matters as factual, that is, discretionary, and others as legal, that is, non-discretionary. If the legal system is neither completely discretionary nor

¹ The only reference to bifurcation by a law-and-economics scholar that I could find is a remark by Judge Posner in his judicial capacity. It is so brief that it may be quoted here in full: 'Consider a finding of negligence in an ordinary tort suit. It is not a finding of fact in the sense that it could be made by someone uninstructed in the legal standard of negligence. Rather it is the application of the legal standard to the facts of the particular case... The broader principle, endorsed by a growing number of cases in this circuit... is that (with immaterial exceptions) the application of law to fact is itself a question of fact for purposes of appellate review. The point is not that it is 'really' a question of fact; that would be absurd.' (in *United States of America v McKinney* (1990) 919 F2d 405, 419). Judge Posner has also written an influential article on the law of evidence: Posner, R., 'An Economic Approach to the Law of Evidence' (1999) 51 *Stanford LR* 1477, but in it no mention is made of the division between evidence and law, so that the question remains untreated.

² See on this point Damaska, M., 'Free Proof and Its Detractors' (1995) 43 *AJCL* 343, Langbein, J., 'The Disappearance of Civil Trial in the United States' (2012) 122 *Yale LJ* 522, Langbein, J., 'Bifurcation and the Bench: the influence of the Jury on English Conceptions of the Judiciary' in Brand, P. & Geltzer, J. (eds), *Judges and Judging in the History of the Common Law and Civil Law from Antiquity to Modern Times* (2012 CUP).

³ In England, the civil jury has largely disappeared – it is nowadays only used in the tort of defamation. The trend began in the late 19th century – for a detailed historical overview, see Hanly, C., 'The Decline of Civil Jury Trial in Nineteenth-Century England' (2005) 26 *JLH* 253. In America, it is somewhat more widespread, though it appears to be on the decline as well – see Langbein (*ibid*).

complete non-discretionary, then some metalaw is needed to separate the discretionary from the non-discretionary. That is what bifurcation does.

The discussion is structured as follows: in Section 1, I define the basic concepts. In Sections 2 and 3, I will sketch out two 'pure' systems of adjudication, one wholly discretionary and the other one wholly non-discretionary. Those familiar with law-and-economics will identify in the first a single, infinitely vague standard and in the second a near-infinite number of infinitely precise rules. In both, it would be pointless to bifurcate. Of course, real legal systems resemble neither. In Section 4, I make the point that if elements of the two systems are mixed – as they are in real legal systems - bifurcation acquires a bite. In Section 5, I argue that under some very rudimentary economic assumptions, our systems of justice must be a mixture of the two pure ones described earlier. This corresponds to the law-and-economics point, by no means novel, that there is a trade-off between legal certainty and the cost of writing law. If that is accepted, then the legal concept of bifurcation has an economic rationale. Section 6 concludes.

I. Definitions

Adjudication is a process in which two or more parties submit to an adjudicator who then intentionally posits a determinate resolution to some dispute between them that may involve mandatory action or forbearance by one or both parties.⁴ To my mind the only element of this definition which is controversial is the requirement that the adjudicator act intentionally. By this I mean intentionality in the phenomenological sense. It must be possible for the adjudicator to conceive of the judgment as a unity.⁵ To put it with less pretense, intentionality means that the adjudicator has to be able to 'make sense' of his decision. This is a very low threshold, in that it does not require strict rationality, rationalisability, or even outward coherence; mere cerebration will suffice.⁶ For a process to have the essential contours of adjudication, it need only provide a determinate solution to a dispute.

Let me now define adjudicative reasoning. Reasoning processes generally entail the mental incorporation of diverse segments of reality into a conceptual whole.⁷

⁴ As Fuller notes, such a broad definition of adjudication can include a great many phenomena that we do not ordinarily conceive of as involving judicial action, such as a father choosing to give a toy to one of his children but not another, or a legislative body impeaching a member of the executive: Fuller, L., 'The Forms and Limits of Adjudication' (1978) 92 Harvard LR 353.

⁵ Husserl, E., Findlay, J. (tr), *Logical Investigations* (2nd Edn, Routledge 1971) pioneered the idea.

⁶ To give one example, a process in which two parties toss a coin to decide who is in the right is not adjudication for lack of intentionality, but if the same parties submit their dispute to an umpire and the umpire tosses a coin because he thinks he does not have the time to listen to the merits is adjudication. For a process to have the essential contours of adjudication, it need only provide a determinate solution to a dispute. The term 'adjudication' *tout court* commits the arbiter to no particular standard of proof, to no specific outcome, and to no measure of external control. Justice Frankfurter's 'kadi under a tree'⁶ (*Terminello v City of Chicago* (1949) 337 US 1, 11) doubtless qualifies as an adjudicator under this definition, as does the stereotypical medieval sovereign who dispenses vengeance and favour at whim.

⁷ Husserl (n 5)

Adjudicative reasoning is special in two ways. One concerns the segments, the other their aggregation. First, the relevant segments of reality must pertain to dispute resolution. Some of them must be properties of either the dispute or of its solution.⁸ Dispute and outcome, being current and prospective elements of the material world, possess an infinite number of properties. To be able to reason about a legal controversy, the adjudicator must compress reality into some manageable conceptual representation. He does this by only focusing on particular elements of the material world that he deems relevant to the issue at hand. I call the properties thus transferred to adjudicative reasoning premises.

Second, to discharge an adjudication, the adjudicator must also link the premises thus isolated to one another. There are a myriad ways that the human mind can link fragments of reality. I limit the discussion to two general patterns, the (strict) logical and the perceptual. In the first place, it is possible to link premises through deduction. It establishes categorical truth. There also exist logical operations that establish truth with some probability, such as induction and analogy. I will refer to the three together as formal, or strict, logical operations. Now, my definition of adjudication does not require that the adjudicator act on the basis of absolutely correct conclusions. Nor does it require him to act on the basis of conclusions that are correct with any particular probability. It follows that the link between two premises may be based on techniques that we do not ordinarily recognise as being strictly logical. It is possible to link premises through, for example, their colligation into patterns, abduction, intuition, and naturalistic reasoning. I will refer to this latter category of premise-mediation techniques as perceptual.

I now turn to bifurcation. Bifurcation, in the plain sense of that word, is the splitting of one thing into two. This can evidently mean different things to practitioners of different disciplines. Thus, medics say that the abdominal aorta bifurcates into two arteries.⁹ Mathematicians say that a dynamical system bifurcates when qualitative differences are introduced by a small variation of its parameters.¹⁰ Potamologists say that a river bifurcates when it separates into its distributaries.¹¹ The meaning that is germane to the present ends is the one that bifurcation bears in Anglo-Saxon legal procedure. In law, bifurcation is the practice of assigning some questions, called legal, to a trier of law and other questions, called factual, to a trier of fact, typically, though nowadays not often, a

⁸ Otherwise, intentionality is likely to be broken: it is not possible to make a mental connection between 'The Battle of Hastings took place in 1066' and 'John is not a thief'.

⁹ Talyor, C., Hughes, T. & Zarins, C., 'Finite Element Modelling of Three-Dimensional Pulsatile Flows in the Abdominal Aorta: Relevance to Atherosclerosis' (1998) 26 *Annals of Biomedical Engineering* 975. I refer to these works merely to illustrate some of the usages of the term.

¹⁰ Kuznetsov, Y., *Elements of Applied Bifurcation Theory* (2nd edn, Springer 1998)

¹¹ Zanichelli, G., Caroni, E., & Fiorotto, V., 'River Bifurcation Analysis by Physical and Numerical Modelling' (2004) 130 *Journal of Hydraulic Engineering* 82

jury.¹² The bifurcation metalaw, accordingly, is the metalaw that identifies some questions as being legal and others as being factual.

Bifurcation grew around the jury institute.¹³ When jury trial predominated, it denoted that some questions are for the judge and others for the jury. For example, in a murder trial – where juries are still used – there might be a question of whether recklessness is the same as intent. Since in the bifurcatory scheme this a question of law, it would be for the judge to answer. At the same trial, it is possible that the defendant will say that he was at work when the victim was killed and that the prosecutor will then contend that the defendant was at the victim’s house. Since the legal system designates this a question of fact, it allocates it to a jury. Where trial is by jury, then, bifurcation is necessary to allocate competences between the judge and the lay trier of fact.

Nowadays, most common-law actions are tried without juries.¹⁴ There is only a judge. In those trials, there are still what lawyers call questions of fact. The judge acts as trier of law and as trier of fact. Judges decide who was where, who said what to who, what the words meant, how they were understood, whether they were understood correctly, who acted, what the consequences of their actions were, what their likelihood was at the time of acting, and so on and so forth.¹⁵ All of this would have formerly been for the jury.

It would be possible, in such a context, to dispense with bifurcation altogether, to cease speaking of questions of law and questions of fact and to treat all the issues that fall to be determined at trial as being the same. The trier of law and the trier of fact being the same person, it might be thought unnecessary that he should play two roles. After all, judges only play one in the civil-law world.¹⁶ There is thus no strong need to discriminate

¹² For some examples of the term being used in that sense, see S Weiner, ‘The Civil Nonjury Trial and the Law-Fact Distinction’ (1967) 55 California LR 1020; E Lee, ‘Principle Decision-Making and the Proper Role of the Federal Appellate Courts: The Mixed Questions Conflict’ (1991) 64 SCLR 235; K Vinson, ‘Disentangling Fact and Law: Echoes of Proximate Cause in the Workers’ Compensation Coverage Formula’ (1996) 47 Alabama LR 723; Fontham, M. & Vitiello, M., *Persuasive Written and Oral Advocacy* (Kluwer 2013); Zorobsky, A., ‘Constitutional Fact Review: An Essential Exception to *Anderson v. Bessemer*’ (1987) 62 Indiana LJ 1209; Hermes, D., Kemp, J. & Moore, P., ‘Leveling the Legal Malpractice Playing Field: Reverse Bifurcation of Trials’ (2005) 36 SMLJ 879; Edith, G., Woody, W., & Winter, R., ‘Compensating Plaintiffs and Punishing Defendants: Is Bifurcation Necessary?’ (2000) 24 LHB 187; Fisher, T., ‘Constitutionalism and the Criminal Law: Rethinking Criminal Law Bifurcation’ (2011) 61 UTJL 811; Louisell, D. & Hazard, G., ‘Insanity as a Defence: The Bifurcated Trial’ (1961) 49 California LR 805; Mueler, G. & Besharov, D., ‘Bifurcation: The Two Phase System of Criminal Procedure in the United States’ (1969) 15 Wayne LR 613; Gensler, S., ‘Bifurcation Unbound’ (2000) 75 Washington LR 705.

¹³ Jescheck, H., ‘Principles of German Civil Procedure in Comparison with American Law’ (1970) 56 Vanderbilt LR 239

¹⁴ Langbein (n 2) outlines the process through which the jury was eroded in the United States. For a comparative perspective on England and Wales, see Jackson, R., ‘The Incidence of Jury Trial during the Past Century’ (1937) 1 MLR 132.

¹⁵ For a recent example, see *Sheikh Tanoon bin Saeed bin Shakhboot Al Nehayan v Ioannis Kent* [2018] EWHC 333, whose first 87 paragraphs concern questions of fact entirely. The judgment is by no means unique.

¹⁶ Damaska (n 2); Damaska, M., ‘Evidentiary Barriers to Conviction and Two Models of Criminal Procedure: A Comparative Study’ (1973) 121 UPLR 506. That is not to say that the civilians treat evidence as being the same

between findings of fact and findings of law. Despite the demise of juries, this has not been done in the common law world. For instance, in Anglo-American law, appeals cannot be raised on points of fact.¹⁷ To determine whether some finding is even subject to review in the higher courts, it is necessary first to say whether it is one of fact or law, that is, whether, had there been a jury, the question would have been for that jury or for the judge. Even though there is seldom an actual jury, there still exist principles which allocate specific questions to them. Those principles are important in contemporary legal procedure. They govern not only the appellate jurisdiction of common law courts, but also the doctrine of precedent. A finding of law is binding on future courts. A finding of fact is not.¹⁸

There is thus no longer bifurcation in the strict sense of always having two triers share jurisdiction over the same proceedings. But there is bifurcation in the sense that there is a metalaw that designates some questions as legal and others as factual. Now, on the conventional understanding of the word 'bifurcation' it might appear that, conceptually, a line can be drawn between fact and law as a matter of logic. The words 'fact' and 'law' imply a difference in specificity.¹⁹ Every law subsumes a number of facts. Therefore, it is possible to conceptualise a single law as the definition of a dataset and the corresponding facts as the elements which comprise that dataset. Since this relationship obtains as a matter of logic, it might appear unnecessary for society to write metalaws to define it. If we are trying to determine whether X killed Y, one question we must answer first is whether Y is in fact dead. If we do not answer the second question, we cannot answer the first. No living person has been killed, though some dead persons were not killed. The question of whether Y is dead is specific to the general question of whether X killed Y. As a matter of logic, then, whether X killed Y might be thought a question of law and the question of whether Y is dead a question of fact. But in legal process, whether X killed Y and whether Y is dead are both designated questions of fact.

Likewise, we might be inquiring whether breach of contract is a criminal offence or a civil wrong. To answer this question, we must define civil wrongs and criminal offences. One question is specific to the other. Yet at law, it would be incorrect to say that the first question is of fact and the second one of law.²⁰ Both are legal. The classification of

thing as law. But there is a requirement of rational proof and the upper courts can review the lower ones' findings of fact.

¹⁷ For an example, see *Goyal v Goyal* [2014] EWCA Civ 523.

¹⁸ That point drives the argument in Chapter 5.

¹⁹ 'Murderers shall be liable to life imprisonment' cf 'John decided to end Joanne's life and stabbed her in the heart'

²⁰ The examples given here also highlight another problem, which I discuss in Chapter IV. We are given only two categories: 'fact' and 'law'. But to solve most disputes, we refer to more than two layers of abstraction. To say whether the defendant is guilty or innocent, we might have to decide what a criminal offence is, whether murder is one, what the elements of murder are, whether intent includes intent formed under the influence of an intoxicant substance, whether the defendant did in fact consume that substance, whether he did so at his own volition or under duress, and whether consuming it impacted his ability to formulate intentions. Some of those questions are legal, others factual, and as will be seen in Chapter 5, some are both at the same time. That there

questions as one or the other is not a matter of strict logic. If the first question were designated as being one of fact, then the jury would decide whether breach of contract is a criminal offence. If the question of whether X killed Y is designated as legal, then the judge would decide what truly happened between the two. Since the system is designed instrumentally, with a view to allocating specific questions to specific triers for specific reasons,²¹ it must specify what questions are assigned to who by writing a metalaw.

Now, if bifurcation is to be meaningful, it must affect adjudicative outcomes. What I mean is that the introduction of a mandatory classification of premises should either condition the outcomes that the system can produce or it should change the objective probability with which some outcomes will be reached relative to others. If it is otherwise, then bifurcation is a mere heuristic. I will now move to show that in a 'pure' system of law, bifurcation alters neither the set of possible outcomes nor the likelihood with which any one possible outcome is likely to obtain. Thereafter, I will show that the obverse is true in a mixed system.

II. Bifurcation in a Pure Rationalist System

From the perspective of the adjudicator, premises can be internal or external. A premise is internal if it originates from the adjudicator's own perception of reality. If, conversely, it comes from a third party, such as a system of law, it is external. Suppose, unrealistically, that there is a system of adjudication which is based exclusively on external premises. For ease of exposition, I will from now on refer to such a system as rationalist.²² Rationalist

are several layers of abstraction but only two labels that can be used to describe them for the purposes of adjudication reflects the instrumental design of bifurcation – a legal system based on pure logic would likely contain more. But since bifurcation arose purely to designate some matters as being for the jury and others for the judge, two labels sufficed.

²¹ Note that the instrumental reasons in question might change. For example, suppose we are given a cause of action in which X sues Y alleging breach of contract because the two had agreed that Y would deliver a sack of potatoes and X then alleges that Y did deliver potatoes, but those potatoes were mouldy. The question of whether the potatoes were mouldy is one of fact. When jury trial for civil actions was still in fashion, it would have been for the jury. One instrumental reason for designing the system in that way would be that corruption was widespread in the premodern period, so it was best to keep the judicial role restricted. In the modern era, judicial corruption is no longer as widespread a concern in England, so the whole case can be tried without a jury. But the question of whether the potatoes were mouldy is still one of fact. The instrumental reason might be that mouldy potatoes are trivial, that trivial problems form the vast majority of cases tried before the courts and that we do not want trivial cases to clog the Court of Appeal and the Supreme Court. I also suggest here another rationale, namely that the drafting of a law that covers the specific case of the mouldy potatoes would be inordinately expensive, so it is cheaper to leave some parts of the dispute to the subjective discretion of the judge. I do not claim that this is an exhaustive list of the rationales for retaining bifurcation. But it suffices to show that it has uses beyond the pre-industrial context in which it emerged.

²² In doing so, I am following the terminology in Damaska, M., 'Rational and Irrational Proof Revisited' (1997) 5 *CJICL* 25. The supposition that such a system does in fact exist is, of course, highly unrealistic. The view that the legal system is truly rationalist held considerable sway in the premodern period (e.g. Coke, E., *Institutes of the Laws of England* (LF 1669)). This was also the view of Blackstone: 'a judge is sworn to determine, not according to his own private judgment, but according to the known laws and customs of the land; not delegated to pronounce a new law, but to maintain and expound the old one – *jus dicer non jus dare*'. (Blackstone, W., *Commentaries on the Laws of England* (Clarendon 1769)). Yet the last publication to advocate this as a realistic conception of the law is, to my knowledge, Lucas, N., 'Logic and Law' (1919) 4 *Marquette LR* 203 cf Holmes, O., *The Common Law* (Gutenberg 1881) 1.

adjudicative reasoning is frequently modelled as an inferential network at whose top lies and which branches out toward specific states of reality.²³ Each node of the network contains a premise. The adjudicator can only navigate between different premises by using strictly logical premise-mediation techniques.²⁴ Rationalist reasoning is for this reason limited to deduction, induction, analogy, and probability.²⁵ Because of the requirement that a categorical finding be produced at the end, deduction is used in every instance of adjudicative activity. Induction, analogy, and probability are only auxiliary.²⁶ The critical point to note here is that since all four are formal logical operations, the adjudicator may treat premises as pure logical objects. In such a system, solving legal disputes is not unlike solving mathematical equations. The human agent may safely assume that the constituent variables do not denote any identifiable element of the material world.²⁷

A rationalist system would contain rules but no standards. Why so? The constraints on the type of logical operation that may be used to decide cases means that the content of the propositions which those operations link must be precise. If the terminal point of the reasoning process is vague, that is, a standard, it is impossible to deduce from it a solution to a given case. Since personal discretion can play no part in adjudication, the laws that

²³ Walker, F., 'Discovering the Logic of Legal Reasoning' (2007) 35 Hofstra LR 1687, 1694ff and Walker, V., 'Visualizing the Dynamics around the Rule-Evidence Interface in Legal Reasoning' (2007) 6 LPR 5. I presently abstract from the problem of proof which features prominently in Professor Walker's works on the subject.

²⁴ This is so because perceptual premise-mediation techniques produce new premises whose 'truth' is independent of that of the given premises. Consider 'John is a doctor, therefore he is a rich man'. If the premise 'John is a doctor' is the only one that is given *ex ante*, the conclusion that he is a rich man can only be confirmed by reference to some further premise that is not given, such as 'All doctors are rich men'. Not being external, that premise must be internal. And if its conclusions are the product of an external and an internal premise, then a system cannot be said to be 'purely' rationalist.

²⁵ I exclude abduction because it erroneously amplifies the probability that the statement in question is true (e.g. '90% of doctors are graduates', 'John is a doctor', 'John is a graduate' elevates the probability that John is a graduate from 90% to 100%. Gianformaggio, L., 'Like-Equal-Similar: Are They to Be Treated Alike?' in Valdez, E. et al (eds), *Normative Systems in Legal and Moral Theory* (D&H 1997) thus argues that abduction is wholly inapplicable to law-finding cf Tuzet, G., 'Legal Abductions' in Bourcier, D. (ed), *Legal Knowledge and Information Systems* (IOS 2003). Tuzet's argument is that abduction plays a role in law-finding where the law is uncertain, a situation which is impossible under the assumption here that all premises (including the 'legal' ones) are given. The argument here, as will be seen, is that it begins to play a role only when a case falls within a determinate law whose application is ambiguous.

²⁶ In the inferential network model, analogy can be used to move sideways, that is, between premises on the same level, and inference can be used to move upwards, that is, from the specific to the general. Since the terminal node is always at the very bottom of the network, the successful resolution of the controversy will contain at least one deductive operation, and usually many more. (Lucas fn 22). Thus 'John stole a cow', 'John is a thief' can be used to infer that 'Everyone who steals a cow is probably a thief'. Suppose that the issue in the dispute is whether Joanne is a thief. This requires the judge to deduce an answer from the inferred conclusion: 'Everyone who steals a cow is probably a thief', 'Joanne stole a cow', 'Joanne is probably a thief'. The same is true of analogy: 'Joanne stole a cow and is a thief', 'Joanne stole a cow', 'Joanne is probably a thief' does not give a solution to the adjudication. It is necessary to know the probability with which Joanne is a thief and to measure this against the probability that is required to resolve the dispute as a finding of theft. Thus the final judgment in a form such as 'Joanne is a thief with a probability of 60%', 'If someone is a thief with a probability of more than 50%, they shall be liable to imprisonment', 'Joanne is liable to imprisonment'

²⁷ Husserl (n 5) 47-51 discusses the distinction at length.

the system supplies to the adjudicator prior to the commencement of the process must be very specific. In such a world, a large up-front investment would have to be made in rules of infinite precision.²⁸ But once those rules are produced, the cost of applying them would be largely eliminated. Such a legal system would be unrecognisable to us. Professors Casey and Niblett, for instance, note that there would be no need for judges.²⁹ The central problem facing the justice system would not be how to apply the law - it would be mechanically applicable to any factual scenario, in the way speed limits are automatically applied to measurements of vehicular speed today. Instead, the main source of difficulty would be the need to communicate micro-directives to their addressees.

Since we do not yet have the technological means to implement an infinitely precise legal regime, I only use it as a theoretical construct to demonstrate that bifurcation would serve no purpose in it. Suppose that there is a system that contains a near-infinite number of infinitely precise rules, that it retains human adjudicators and also that the system bifurcates, that is, it forces adjudicators to call some premises factual and others legal. To what extent can this metalaw change the system? Recall that bifurcation is functional when it conditions the available set of outcomes or when it influences the probability with which particular outcomes are reached. Under rationalism, bifurcation can do neither. This follows from the nomology of the logical operations involved. In the movement from the general to the specific, the major and the minor premises are given by the rules of formal logic. It is not possible for their order to be changed by fiat.³⁰

Returning to the analogy with algebra, suppose that in the equation in question 'x' and 'y' denote the variables. It is clear that requiring the mathematician to swap these notations would not alter the final solution in any meaningful way. If that analogy will not suffice, I offer a legal example. Suppose that we are given a fictional polity with the following statements of law: 'if someone commits a driving infraction, they are liable to a fine of £50', 'speeding is a driving infraction', 'speeding means to drive a car at a speed in excess of 50 km/h'. We are then told the fact that 'M drove at 60 km/h'. We may order the premises in an inferential tree: the prohibition on driving infractions would be on top, followed by the categorisation of speeding as a driving infraction, and lastly the definition of speeding. Having worked our way from the axiom to the last definition, we may then

²⁸ The point is from Kaplow, L., 'Rules versus Standards: An Economic Analysis' (1992) 42 Duke LJ 557, which I summarised in Chapter 2. The alternative would be to have very few laws, in which case regulation shrinks to what is feasible given the requirement of infinite legal certainty, or to have many laws, all of which are wildly under- or over-inclusive. For example, it is possible to regulate complex domains, such as negligence, by saying that everyone is liable for all damage caused, where damage is defined as anything which anyone might say is harmful and causation is defined as any conceivable link between two events. In that case, the law would be perfectly precise, but it would not fulfil its social objectives very well.

²⁹ Casey, A. & Niblett, A., 'The Death of Rules and Standards' (2017) 92 Indiana LJ 1401

³⁰ Suppose that the major is 'All doctors are graduates' and the minor is 'John is a doctor'. It is possible, as a mental exercise, to switch the linguistic labels 'major' and 'minor' around, so that 'John is a doctor' is the major and 'All doctors are graduates' is the minor. This change of the order of the premises cannot, however, change the conclusion in any way.

ask whether M's speed fulfils the resultant sanctionability condition. Since the answer is in the affirmative, we may conclude that there is only one possible outcome of the adjudication -- M is liable to a fine of £50.

Suppose that, in the same polity, a metalaw is introduced which provides that 'whether a speed is in excess of 50 km/h is a matter of fact, whether speeding is a driving infraction is a matter of law'. Would the outcome of M's case change? Evidently not – the metalaw merely instructs us that the definition of speeding is more specific than the category of driving infractions. But that relationship is already implicit in the content of the legal propositions. It is inalterable. The point is perhaps best seen if one tries to imagine a different metalaw, such as 'whether a speed is in excess of 50 km/h is a matter of law, whether speeding is a driving infraction is a matter of fact'. We would still reason about M's case in the same way. We would assume the 'factual' proposition to be general and the 'legal' one to be specific. It is not possible, as a matter of logic, to deduce from the specific to the general. If we call something specific 'legal' and something general 'factual', the nature and the outcome of the deductive process would not change. Since in a pure rationalist system it is possible to order all premises from the most general to the most specific, it makes no sense to add to that system a metalaw which classifies some of them as legal and others as factual.

Such a system, as noted, is beyond our current technological grasp.³¹ The example here concerns speed limits, an area in which it is thought that there is sufficient information to provide a crystal-clear rule whose under- and over- inclusiveness does not detract too much from our pursuit or efficiency or fairness. In other areas – say the production of pharmaceuticals or the regulation of labour relations – we do not know enough to regulate with such precision. Nor do we have the means to acquire the necessary information. These areas, and with them many others, we can only govern through standards. The cost of information is too high. Accordingly, some legal uncertainty must be tolerated. For this reason, a rule-only system cannot be established at present. Bifurcation, it was seen, would be otiose in such a system. But this need not mean that it is also otiose in ours.

III. Bifurcation in a Pure Subjectivist System

Bifurcation would also be redundant in the exact opposite of a rationalist system. It was seen that a pure rationalist system would contain a near-infinite number of infinitely precise rules. The opposite kind of system, which I call subjectivist, would contain one infinitely vague standard. The adjudicator would be permitted to derive all adjudicative premises from his subjective perception of reality. Relative to a rationalist system, a subjectivist one affords the adjudicator much greater licence to choose between premise-constitutive properties and between premise-mediating techniques. As far as properties are concerned, the only limitation is the individual adjudicator's capacity for perception.

³¹ Casey & Niblett (n 29) discusses the technological aspect of the problem.

Subjectivist premises may in practice include anything that can be brought to bear on the adjudicator's attention. They can contradict universally-shared representations of objective reality³², they can be highly polarising³³, or repugnant.³⁴ And the unfettered discretion to select premises implies an unfettered discretion in the choice of linking techniques. Thus under a subjectivist system, both pure logical and perceptual operations are permissible.³⁵

To appreciate the economic implications of the adoption of an infinitely vague standard, suppose that its content is 'all disputes shall be decided according to the will of the adjudicator'. That standard is very cheap to write – the only information that it records is that an adjudicator exists. To be sure, no up-front investment is involved in the writing of the law. However, it is extremely expensive to predict how that infinitely vague standard will apply: nothing in it can serve to ground any kind of prediction. Like a rationalist system, a subjectivist legal order would probably not be recognisable to us as a justice system. For example, the adjudicator would be free to refuse to decide some of the cases that are brought to him. He would also initiate litigation between unwilling parties if it suits him. This is evidently not the manner in which the legal system functions today: what the standard prescribes is the exercise of sovereign power as it was before the separation of the powers.³⁶

The example, like the one that preceded it, is thus only useful so long as it enables me to discuss the viability of bifurcation within a stylised analytical scheme. In a pure subjectivist system, bifurcation would serve no discernible function. If there is no limit on the adjudicator's ability to pick premises, then there is no way of defining *ex ante* the set of properties of reality which may validly constitute premises. There being no way to construct such a set, it is also impossible to classify its membership. Recall that I defined bifurcation as a metalaw which classifies premises as factual or legal. If the system is subjectivist, there is simply nothing to classify. If we are told that the system is subjectivist, then that 'x' is law and that 'y' is fact, or that 'x' must always be more general than 'y', this alters neither the set of possible outcomes nor the likelihood that one outcome or another will be chosen. Firstly, the adjudicator may achieve any outcome that he desires by simply declaring that 'x' and 'y' are not valid premises and using 'm' and 'n'

³² e.g. 'The Earth is flat'

³³ e.g. 'God made the Earth'

³⁴ e.g. 'The Earth can only sustain a master race'

³⁵ The permissibility of the latter follows from the admissibility of all perceived properties as potentially valid premises: the adjudicator can take a group of properties, group them together according to a pattern, and from this he can derive another property which is different from the whole. Given that there is no limitation on the manner in which reality is truncated for adjudication purposes, this separate property can validly constitute an adjudicative premise.

³⁶ Damaska (n 2) and Fuller (n 4) discuss adjudicative systems of this kind. Fuller gives the example of two children quarrelling over a toy. A parent, intervening, may give the toy to one child or the other, or to neither, and may or may not give reasons. He may also refuse to intervene, in which case might will make right. The process is still adjudicative, in that a third-party posits a permissible course of future action to both parties. It is not, of course, litigation in any form that we would recognise.

instead. He may choose between outcomes freely. Secondly, even if he does use 'x' and 'y', the fact that one is more general than the other does not make it more likely that he will apply 'x' to 'y' in accordance with the rules of deduction. He is free to abduct some higher-order principle or to distil some impressionistic premise from 'x' and 'y' together. Treating 'x' and 'y' as a syllogism is an option, and just that. And as an option, it is available irrespective of the bifurcation metalaw.

For example, suppose that we are told that a system is subjectivist, that the premise 'speeding is a driving offence' is a matter of law, and that the premise 'speeding means driving at 50 km/h or more' is a matter of fact. Firstly, does this condition the set of possible outcomes? The answer must be in the negative. There is no obligation on the adjudicator to even consider whether something is an offence before determining the outcome. He is at liberty to fine M because M is a woman and he does not believe women should drive, or because he does not like the colour of M's car, and so on. Secondly, does the metalaw make it more or less likely that M will be fined? I think not. Even if the adjudicator decides that the two propositions which the metalaw identifies are relevant to the adjudication, and even if he infers from them that driving at more than 50 km/h is a driving offence, he would still be free introduce some further premise – for example that more able drivers have a defence against driving offences – and hold M blameless. The probability that the adjudicator will introduce such a defence depends on his personal convictions, not on the metalaw. So the metalaw makes no difference.

A pure subjectivist system is certainly technologically feasible. It is not, however, desirable. It is dependent for its functioning on the benevolence and wisdom of the adjudicator. Even on the assumption that the adjudicator is in fact benevolent and wise, no member of the polity would be able to predict the concrete manifestations of his benevolence and wisdom. Accordingly, it would be very difficult for individuals to commit credibly to contracts or to plan complex activities around identifiable norms.³⁷ This amounts to nothing but the very intuitive proposition that a legal system cannot be based on a single standard. There must be rules. It was seen in the preceding section that a purely rule-based system would have no need for bifurcation. It was also seen in this one that a standard-only system too would have no use for it. The same, however, is not true of a system that combines the two.

IV. Bifurcation in a Mixed System

The system of adjudication in modern capitalistic societies does not authorise individual judges to decide cases on grounds of personal preference. It therefore cannot be wholly subjectivist. But there is in all legal systems quite a lot of room for discretion. The system is not wholly rationalist either. Recall that a subjectivist system encompasses premises that are internal to the individual adjudicator and further that in a rationalist system, all

³⁷ Damaska (ibid)

premises are external. Between the two, every possible source of premises is covered. If capitalist justice is at neither extreme, it must be in the middle.

A mixed system contains laws that are neither infinitely precise nor infinitely vague. Rules and standards exist in such a system, but the concepts are relative rather than absolute. It is only possible to say whether a given law is a rule or a standard if it is contrasted to some vaguer or more precise alternative.³⁸ The choice of how specific any given law is or should be reflects a trade-off between the cost of information incurred in writing it and the cost incurred in predicting its application. That is the kind of legal system that predominates in modern capitalistic polities.³⁹ I now propose to show how bifurcation can and does change outcomes in a mixed system.

In a mixed system, rationalist inference is applied to laws. It covers the premises from the axiom at the top of the inferential tree to the point at which it is no longer possible to make strictly logical progress towards specificity. All premises below that point are identified and connected through subjectivist modes of premise-mediation and premise-identification. Bifurcation draws the line between legal premises, to which certain reasoning techniques are applied, and factual premises, to which other reasoning techniques are applied. That distinction serves its function under both jury and bench trial. If there is a judge and a jury, the judge is limited to legal premises, which he may only analyse as if in a rationalist system. The jury is allocated matters of fact, which it may treat as if it were a subjectivist adjudicator. If there is no jury, the bifurcation metalaw tells the judge that he may act as if he were a juror, but only when analysing questions of fact. That licence is limited by the bifurcation metalaw: the appellate courts police a rationalist approach to questions of law. In a mixed system, then, bifurcation, by classifying some premises as legal and others as factual, indicates the set of permissible reasoning techniques in respect of questions classified one way or the other. The classification of two or more premises as 'law' or 'fact' defines the set of mental operations that can be legitimately used to connect them.

Some examples may be helpful. I will begin with some matters that the bifurcation metalaw designates as factual. If the judge at trial is asked to determine whether a certain witness told the truth, he may freely refer to matters such as his facial expression, his manner of speaking, his attitude to the process, that is, he may form an impression of his demeanour and use it to establish the veracity or lack thereof of his account.⁴⁰ If the judge is given incontrovertible evidence that the defendant entered a stranger's house at 10.59 and that he left the same house at 11.04 carrying the stranger's television set, he must

³⁸ Kaplow (n 28) treats the two as a dichotomy, though he concedes that this reflects analytical convenience: see n 6 *infra*.

³⁹ Kaplow (*ibid*)

⁴⁰ E.g. *Royal Bank of Scotland v Highland Financial Partners* [2012] EWHC 1278; *Abramovich v Berezovsky* [2012] EWHC 2463 (Comm), [110]-[113] per Gloster LJ

abduct the most likely explanation of the defendant's conduct.⁴¹ If he is told that all members of a certain group of army officers consent to being set on fire as a joke, he must determine whether this is realistic on the basis of his personal experience of humour and the army.⁴²

Discretion is permissible because the law is not infinitely precise: it contains standards. Treating the questions just described as if they were legal, that is reasoning about them in a formal logical way, would require the lawmaker to pre-formulate rules that contain, among others, the specific instances in which behaviour evinces truthfulness and deceit, all the possible causes of spending five minutes in a stranger's house with probabilities attached, and an exhaustive list of the components of humour. It is precisely because the lawmaker cannot provide such premises – either because the cost is prohibitive or because it outweighs the benefits – that perceptual reasoning is and must be permissible.⁴³

Conversely, if a judge is asked whether telling lies to a foreign court is a crime in England, he must determine if so much is deducible from the propositions 'if any person lawfully sworn as a witness... makes a statement material in that proceeding, which he knows to be false or does not believe to be true, he shall be guilty of perjury'⁴⁴ and 'a statement made by a person lawfully sworn in England for the purposes of a judicial proceeding... in a tribunal of any foreign state shall, for the purposes of this section, be treated as a statement made in a judicial proceeding in England'⁴⁵. If the judge is asked whether it is legal to pick wild mushrooms on somebody else's land for personal consumption, he must find out whether this follows from Sections 1 and 4(3) of the Theft Act 1968. If he is asked whether it is possible for a contract to be made between two persons who have never communicated with each other, he must arrive at a general principle from the line of authorities beginning with *Powell v Lee*⁴⁶ and then an exception from *Carlill*⁴⁷ before deducing a final answer to the question from the two precedent inferences. Solving these problems does not require or permit the judge to apply his views on the proper limits of the nation state, the nature of personal property, or the ethics of promise.⁴⁸

⁴¹ For a combination between a reliability of witnesses problem and abduction see *R v Bowman* [2006] EWCA Crim 417, [43]-[173] per Gage LJ

⁴² *R v Aitken and others* [1992] 1 WLR 1066

⁴³ Note, further, that there is no connection between the availability of perceptual reasoning and the relative specificity of the premises. The premise 'X blushed when he told the story' is more specific than 'X was embarrassed when he told the story', and 'X was embarrassed when he told the story' is more specific than 'X is a habitual liar'. Yet neither of these premises is legal.

⁴⁴ Section 1(1) Perjury Act 1911

⁴⁵ Section 1(4)(c) Perjury Act 1911

⁴⁶ [1909] 99 LT 284

⁴⁷ *Carlill v Carbolic Smoke Ball Company* [1892] EWCA Civ 1

⁴⁸ And again, this is independent of relative specificity: *Powell v Lee* is more general than *Carlill*, yet it would be absurd to treat the former as law and the latter as fact.

Here, bifurcation determines the scope of permissible reasoning techniques in respect of a separate class of premises. Two statements may be classified as law and this will determine what conclusions can be drawn from them together irrespective of the facts, and vice versa. This would be inconceivable in a 'pure' system. In 'pure' systems, the same premise-mediation techniques are available to mediate between *all* premises. It is for this reason unnecessary to specify the kinds of reasoning techniques that are available to the adjudicator in respect of specific premises. In a mixed system, conversely, different premise-mediation techniques must be applied depending on the type of premise under consideration. The metalaw matters.

So far, I have said what bifurcation does in a mixed system, but I have not demonstrated that this has any plausible impact on outcomes. Suppose that we are given the three laws from the example that I used before, the facts are that M drove at 60 km/h, but the system rather than being rationalist or subjectivist is now mixed. Suppose, first, that the metalaw is that whether someone drove at more than 50 km/h is a matter of fact and whether speeding is a driving infraction is a matter of law. The judge has no choice but to hold M liable – he must apply the law to the facts. Now suppose that the metalaw instead states that whether someone drove at over 50 km/h is a matter of law, but whether speeding is a driving infraction is a matter of fact. Now, the probability that M will be found liable is lower than one – the judge is free to decide that, on the facts of the individual case, the act of driving at 60 km/h was not an infraction at all. The set of probable outcome changes, and the change is brought about entirely by a variation in the metalaw.

What emerges, then, is that in a system which contains laws that are neither infinitely vague nor infinitely precise, bifurcation is functional. Which questions are legal and which factual matters: classification conditions the outcomes that the system produces. I think this stands to reason. If the system strikes a trade-off between the cost of writing laws and the cost of applying them, then it is necessary to indicate to the judge when he must apply rationalist techniques to the law as written and when he is free to form his own, subjectivist judgment of the material put before him. The more rule-like the law, the less the discretion, and vice versa. But since discretion in itself is neither eradicated nor unfettered, the content of the metalaw matters.

V. Implications

It was seen that in the two 'pure' systems that I described, there was no need for a bifurcation metalaw – it did not produce any changes as to outcome – and that the obverse is true in a mixed system. I will now try to show why it is inevitable that our system should be mixed.⁴⁹

⁴⁹ By this, I do not mean that it is *only* a result of economic pressure. It may well be that there is a correctivist or philosophical or ethical reason to leave some discretion to the judge in some areas.

A pure subjectivist system would be very costly in a modern capitalistic state. The interpersonal differences between individual adjudicators are without doubt considerable. Adjudicative premises and the way they are linked are likely to vary in every case. This would make process uncertain and outcomes inconstant. Such a state of affairs can only be tolerable in a polity in which an effective dispute resolution machinery is not much needed – a fief or a small tribe spring to mind.⁵⁰ The intensification of the division of labour is likely to produce a need, at some point, for a large degree of uniformity in both process and outcome. This enables the dispersed participants in the economy to coordinate their actions around some common understanding or expectation of sanctionable and non-sanctionable behaviour.⁵¹ For that expectation to be stable, adjudicative decision-making must be to some extent formalised. And that formalisation can only be achieved at the cost of excluding the experiential data possessed by each individual adjudicator.

Bifurcation is also unnecessary in a rationalist system. Why is it that we cannot have a purely rationalist system? Rationalist adjudication does provide certainty, but it only does so at the cost of articulating premises *ex ante*. Since for some premises this cost can be exceptionally high, it becomes uneconomical to cover all of the adjudicative ground.⁵² Whoever it is that sets down the premises at the outset must be able to foresee and describe every contingency to which the law might apply. The predictive powers of lawmakers are in practice quite limited. They must instead gather information about the potential effects of the laws which they contemplate. That information has a cost – the acquisition of complete information is impossible and the acquisition of partial information difficult. Accordingly, complete predictability is unattainable and the optimal law is less than perfectly precise.

Modern systems are in some way rationalist, in that the judge is bound by many laws emanating from a source that is external to him. They are also partly subjectivist, in that the law does not supply a sufficient number of premises to allow the judge to simply ‘trace’ the dispute from an axiom to a law which corresponds perfectly to the facts. Laws are somewhat more abstract than the facts which come to be litigated. The lawmaker

⁵⁰ The point is succinctly made in Damaska (fn 22). In economic theory, the conditions for this obtain where the number of participants in the polity is relatively small and they interact repeatedly. Norms can, in such a society, be self-enforcing because the possibility of ostracism is likely to be a sufficient threat to any potential norm-breaker. This is an argument of considerable pedigree in economic science. For a modern rendition of the argument, see Rabin, M., ‘Incorporating Fairness into Game Theory and Economics’ (1993) 83 AmER 1281

⁵¹ Perhaps the best-known exposition of this idea is North, D., ‘Institutions, Institutional Change, and Economic Performance’ (CUP 1991) 40ff

⁵² The only alternative hypothesis in which the premises are not given *ex ante* is that in which judges discover a transcendental principle of justice by themselves and then proceed to construct an inferential tree from it. This would correspond loosely to the natural law tradition. The principal problem is the elusiveness of a concrete transcendental axiom. The cognitive limitations of human adjudicators simply do not permit them to realise this aspiration. It is for this reason that I do not propose to treat it extensively here.

economises on precision – some certainty is achieved by promulgating laws. But at some point, the laws run out. Thereafter the system is subjectivist.⁵³

In economic terms, the identity of the optimal solution to the uncertainty-information trade-off depends on the *ex ante* costs of producing laws and the *ex post* costs of uncertainty. If the cost of uncertainty is zero, a subjectivist system is efficient because the capricious decisions of the adjudicators are not harmful, and to expend anything to constrain them would be wasteful. If the cost of producing laws is zero, a rationalist system is efficient because it eliminates the waste from uncertainty at no cost. Both costs being positive in reality, a balance must be struck. It is not my intention here to provide anything that remotely resembles an actual prescription on the manner in which it ought to be struck. To my ends, it suffices to say that the very need to strike a balance means that in the design of any one body of law, there will be instances where a general standard will be preferred to a specific rule. When a standard is chosen, all premises which are more specific than that standard itself are subjectivist.

This does not explain why in general our system tends to prioritise rationalism over subjectivism. The cost of information is to some extent a function of technological development, and the cost of certainty is partly a function of the specialisation of labour.⁵⁴ I do not for a second propose to treat these factors as determinative of the course of legal history. Nor do I profess to be able to derive from them a model of any considerable explanatory potency.⁵⁵ The only general point worth making here is that, since

⁵³ It might be helpful to note that, on both sides, the process is subject to constraints that are not related to bifurcation. On the 'legal' side, the judge's reasoning is limited by certain canons of interpretation that impose a hierarchy between two otherwise possible inferences. For example, suppose that one law provides that 'Obligations arising from contracts have the force of law' and another that 'A contract of slavery shall be null and void'. It is in principle possible to conclude from the above that a contract of slavery has the force of law and that it is null and void at the same time. Without a canon of interpretation which specifies some hierarchy between the two, it would be impossible to resolve the problem. On the 'factual' side, certain properties of objective reality are prohibited from ever forming premises in adjudicative reasoning. The judge cannot, for example, decide to consider the defendant's testimony as truthful because she is white, nor can he choose to shift the burden of proof on the accused because he is rich. This will be so even if the judge genuinely perceives that whites do not lie or that the rich can handle the burden of proof more effectively than the state's underfunded prosecution service.

⁵⁴ The cost of information is a function of technology because new technology allows information to be disseminated more cheaply. This is evidently true of the Internet in our age and equally of the printing press, the invention of writing, and a myriad others. The specialisation of labour influences the cost of legal uncertainty: in a small, agricultural society, most exchanges can be effectively policed through the threat of ostracism. Whether the law governing the exchange is certain or not is neither here nor there, and there is not much need for sophisticated legal instruments. On the other end of the spectrum, in a highly specialised economy many exchanges are wholly impersonal, so that some third party is needed to enforce them. Since parties in planning their actions will have reference to the projected behaviour of that third party, and in the case of state enforcement the third party announces how it will act through laws, the certainty of those laws will influence the plans of private parties. The greater the specialisation of labour, the higher the frequency of impersonal exchange, and the greater the importance of legal certainty.

⁵⁵ Firstly, there are doubtless a myriad other factors that determine the organisation of adjudicative activity in society at any one time, some of which economic (capture, type of economic activity, and the size of the polity spring to mind) and some of which not (widespread belief that the sovereign is the earthly embodiment of a

technology has tended to improve over time and labour has tended to become more specialised, the cost of information has become lower and the cost of uncertainty higher. This in turn serves to explain why in modern systems of justice the rationalist paradigm is paramount and the subjectivist one only secondary, that is, why judicial reasoning is predominantly identified with a process of logical deduction, with the judge's innate capacity to discover 'truth' relegated to a secondary role.⁵⁶ It may also explain why the opposite was true for most of human history.⁵⁷

VI. Conclusion

At the beginning, I said I would try to show that bifurcation has an economic rationale, and also that it is instrumental even under bench trial. In a system of law based purely on logic, there is no place for bifurcation – it is unnecessary to classify some things as law and others as fact because, by definition, there is one, and only one, order of things within the system. In a system of law based purely on discretion, bifurcation makes no difference – since every outcome is permissible, it is pointless to structure the process through which it is reached. In a system with discretionary and non-discretionary elements, however, bifurcation marks some aspects of adjudication as subjective and others as objective. It holds that system together. In doing that, it allows us to strike a cost between the cost of uncertainty and the cost of writing laws.

If this is right, then it becomes apparent why bifurcation has survived the demise of jury trial. Even if we dispense with lay triers of fact, our system must be mixed. A system based entirely on logic would be perfectly certain, but also too costly. A wholly subjectivist system is attainable but undesirable – it would be too uncertain. We strike a balance by making some parts of the legal system rationalist – that is, based on strict logical operations whose correct execution is subject to review – and some subjectivist – that is, subject to the discretion of the judge. That system can only function if there is a mandatory boundary between the domain of logic and the domain of discretion.

deity, the distribution of political power, cultural propensity for some forms of justice and aversions to others). Secondly, the terms used here, such as 'specialization of labour' and 'technological development', are too vague to accurately capture adequately the chronological development of justice systems.

⁵⁶ Damaska (fn 22)

⁵⁷ This line of reasoning concerns exclusively the relationship between the certainty of the findings and their precision. What it excludes is the quality of the outcomes that are reached other than constancy. A system can strike the optimal balance between certainty and information and still be highly unsatisfactory. By this I mean that the type of economies and diseconomies that have been discussed so far are procedural. They relate to the faculty and frequency with which the system delivers some outcome. Nothing turns on the quality of the outcome. Take allocative efficiency as a desirable outcome of legal proceedings. A system may be procedurally efficient while its laws are deeply inefficient, and vice versa. Suppose that a system contains a single law, such as 'the claimant always loses'. The system can be procedurally efficient if it ensures that no case brought before it ever results in substantial redress for the person bringing it. It would also be substantively inefficient because anarchy would reign. (See Singer, J., 'The Player and the Cards: Nihilism and Legal Theory' (1984) 94 Yale LJ 1.) Moreover, since the costs of drafting and uncertainty are to at least some extent influenced by factors that are exogenous to the adjudication system, such as technology, the identity of the procedurally efficient system will vary over time. And if there is a link between procedure and law-generation, as is the case when judges follow each other, a procedural system which is efficient for a given distribution of drafting and uncertainty costs can yield potentially inefficient laws.

Chapter V

FACT, LAW, AND LEGAL CHANGE

In the preceding chapter, I attempted to show the rationale of bifurcation. I now want to discuss its effects. My argument, in essence, is that in the long run bifurcation in common law systems causes laws to change. The mechanism is this: a bifurcation metalaw designates some questions as legal and others as factual. Fact and law are artificial, imperfect categories. Some questions are simultaneously factual and legal. In a precedential system, holdings of law are binding on future courts whereas holdings of fact are not. If a judge wants to achieve a particular outcome in a case, he may use this taxonomic lacuna to produce it. He may claim that he is not bound by a previous case because it establishes a point of fact but not of law, or he may attempt to influence future judges by elevating his own holding from one of fact to one of law. In the long run, this allows conflicting interpretations of the existing law to ventilate around the legal system. The law becomes more applicatively uncertain with every judgment. Eventually, the law becomes so uncertain that it has to be reformed. This is important for two reasons. Firstly, the received wisdom in law-and-economics is that precedent converts standards into rules. If I am right, then this must be wrong. Secondly, the efficiency of the common law hypothesis posits that under precedent, the law moves from inefficient to efficient laws. If my argument here holds, then legal change at common law is independent of efficiency: every law becomes uncertain with time and amortised laws eventually have to be replaced with unamortised ones. Certainty, not efficiency, drives the process.

To relate this to the literature, recall that Professor Kaplow argued that as standards are applied by the judiciary, they are converted into rules.⁵⁸ In doing this, he explicitly set aside problems of legal theory.⁵⁹ The legal-theoretical problem that he likely had in mind was the ineradicable uncertainty of the language in which laws have to be phrased. To the legal realists, all law is radically indeterminate.⁶⁰ Evidently, if one accepts that, there is not much of a distinction between rules and standards. Even if a law looks rule-like, it is still a standard in the hands of a capable manipulator.⁶¹ Thus there is Professor Kaplow's theory of language, in which the law can be made objective, though at a cost, and there is the legal realist theory of language in which no matter how specific we make the law, judges decide all cases subjectively.

⁵⁸ Kaplow, L., 'Rules versus Standards: An Economic Analysis' (1992) 42 Duke LJ 557, 577-9, 608-18

⁵⁹ Ibid infra n 5

⁶⁰ See Frank, J., *Law and the Modern Mind* (Transaction Pub 1931). For a modern rendition, see Kennedy, D., "A Left Phenomenological Alternative to the Hart/Kelsen Theory of Legal Interpretation" in Kennedy, D., *Legal Reasoning, Collected Essays* (Davies Book Pub, 2008).

⁶¹ Kaplow himself was alive to the argument, but chose to set it aside: see Kaplow (n 58) n 5 infra.

Here, I relax Kaplow's assumption, but I do not adopt that of the legal realists. Legal positivism offers a middle ground: legal language is always indeterminate, but only partly so. In line with Hart's terminology, every law has a core and a penumbra.⁶² The core is determinate: any case that falls within it can be solved independently of the judge's preference. The penumbra is indeterminate. When the case falls in the penumbra, there is room for discretion.

Kaplow's original argument is in fact very easily transposed to the positivist legal schema. Judges decide cases under a standard. Some cases fall within the core of the standard – there can be no doubt that a person driving at 250 km/h through a schoolyard is unreasonable. The resolution of cases that fall in the core of the law do not add anything to that law's clarity. We learn nothing new about the reasonableness standard from the schoolyard case. Other cases fall in the penumbra of the law – a person driving at 29 km/h through an empty schoolyard in summer because he believes it to be a parking lot might be reasonable or unreasonable, depending on one's interpretation of his actions and of the word 'reasonable'. When courts decide penumbral cases, they interpret words and actions. In doing this, they expand the core of the law: once we know how a judge would solve the second case, we know how similar future cases will be dealt with, so that what was previously in the penumbra is now in the core. We learn something new about the law. Thus, even if partial linguistic indeterminacy is introduced to Kaplow's framework, it is still possible to say that precedent converts standards into rules.

Kaplow's argument is only seriously in question once we account for the role of the bifurcation metalaw. We saw in the preceding chapter that a bifurcation metalaw designates some findings as legal and others as factual. A judge may find that a person driving at 29 km/h through an empty schoolyard in summer because this *as a matter of fact* does not violate the existing law or because *as a matter of law* there is an exception for those who believe they are driving around a parking lot. If what has been decided is a point of fact, then the standard is not converted into a rule – it remains a standard because the case was within its core. If what was decided is a point of law, then the standard is converted into a rule – the law expands to capture a new situation. This is so because holdings on points of law bind future courts but holdings on point of fact only bind the parties to the case – under the doctrine of precedent, future judges are completely free to disregard them.

But whether a past case concerns a point of fact or a point of law itself depends on the interpretation of the bifurcation metalaw. That metalaw is in itself not perfectly certain. In law-and-economics terms, we would say that it is a metastandard rather than a metarule. In the language of legal positivism, the bifurcation metalaw too has a core and a penumbra. It says that some things are questions of law for the judge and others are questions of fact for the jury or judge-as-jury. It does not contain a criterion for

⁶² HLA Hart, *The Concept of Law* (2nd edn, 1997 OUP)

determining whether questions whose status is uncertain are for one or the other. All that it tells us is that laws are more general than facts. But since there are several layers of abstraction involved in the determination of any one case, we need to know *how* general a thing must be to be for the judge. Since the metalaw contains no such dividing line, its operation is fuzzy. We know that whether intent is or is not an element of murder is a question of law – intent is in the core of the bifurcation metalaw’s definition of ‘law’. We do not know whether ‘reasonableness’ is a question of law or a question of fact. It is in the penumbra of the bifurcation metalaw.

Consequently, when there is a holding on a question which falls in the penumbra of the bifurcation metalaw, judges may disagree as to whether that holding binds them. If the parking lot case was decided on a point of law and in accordance with the pre-existing law, it binds all posterity until reversed. If it was decided on a point of fact, it binds nobody other than the driver and the local city council.⁶³ Accordingly, there might be valid doubts in the present as to whether a standard was converted into a rule in the past. As times goes on, more cases are decided, and of those each may be doubtful, so it becomes more and more unclear whether (and when) the standard was converted into a rule and if so, what rule it was converted into. Eventually, this compromises the standard itself and a new one must be adopted. Kaplow’s argument can be qualified: judges convert standards into rules when the standard that they are given is in the core of the bifurcation metalaw. They convert standards into other standards when the standard that they are given is in the penumbra of the bifurcation metalaw.

The rest of this paper is organised as follows: I will first discuss the fact-law distinction, showing it to be artificial. In the second part, I sketch out a model of legal judgments. In the third, I introduce the positivist theory of legal uncertainty. In the fourth, I will show how positivist uncertainty and the bifurcation metalaw combine to cause a standard to be converted into another standard through precedent. The fifth part discusses the implications and the sixth concludes.

I. Fact and Law

I earlier defined bifurcation as a metalaw which delineates facts and law. I now continue by positing that there is no way of accurately defining the two in a mutually exclusive way. If we are given two statements, we may say that one is more general than the other, or that one defines a set and the other is an element of that set. A law is general, a fact is specific. Does this capture the bifurcation metalaw as it operates? I will argue that it does not. Consider, first, the following example, in which it does:

(A) John killed Mary on purpose.

(B) Murder requires intent to kill or cause grievous bodily harm.

Statement (B) is more general than statement (A). John killing Mary is part of the set of instances in which somebody kills with intent. Therefore, if we are told that the

⁶³ See the next chapter for a worked example of the process.

bifurcation metalaw is that statements of fact are specific and statements of law general, we can infer from that metalaw and the content of the statements that (B) is a law and (A) is a fact. That is correct: whether John killed Mary would be for the jury,⁶⁴ whether intent is an element of the offence would be for the judge.⁶⁵ If found guilty, John can appeal and say that (B) is false, but he cannot argue before the upper courts that he did not kill Mary on purpose. If the case is the first to establish intent as an element of murder and there is no precedent for the contrary proposition, future courts are bound to apply (B) but not (A).

Consider, now, the following pair of statements:

- (B) Murder requires intent to kill or cause grievous bodily harm.
- (C) Murder is a criminal offence.

Statement (C) is more general than (B). Therefore, if we apply the bifurcation metalaw, we would expect the following to be true: whether intent is an element of murder is a question of fact. A finding that murder requires intent cannot be appealed to the upper courts. In future cases, the question of whether intent is a requirement for murder can be decided anew. None of those statements are true.⁶⁶ Moreover, (A), (B) and (C) can be applicable within the same proceedings. If we apply the metalaw to each pair, we would conclude that (B) is simultaneously a statement of law and a statement of fact. It would be for the jury and for the judge at the same time.

Consider, now, another pair:

- (C) Murder is a criminal offence.
- (D) Article 2 of the European Convention of Human Rights imposes on the state an obligation to protect human life on the signatory states.

Statement (D) is more general than (C). The criminalisation of murder is one example of the ways in which the state does protect human life. Therefore, under the bifurcation metalaw which stipulates that general statements are laws and specific one facts, the existence of an offence of murder is a question for the jury. If the jury finds that murder is not a crime, that finding cannot be appealed. If it finds that murder is a crime, in the next case another jury might decide that it is not a crime. Those propositions are obviously untrue. The same goes for the metalaw as formulated here.

Consider, lastly, the following pair of statements:

- (A) John killed Mary on purpose.
- (E) John fired a bullet through Mary's head.

Statement (A) is more general than Statement (E). Does this mean that Statement A is a question of law? This would be true if it is for the judge, if it can be appealed, or if it binds

⁶⁴ See for example *R v Lovell* [2018] EWCA Crim 19, para [18]-[19].

⁶⁵ *R v Woolin* [1991] 1 AC 82

⁶⁶ *Lovell* (n 64) may serve as an illustration again: Lovell appealed on a point of law, the facts had to be taken as found by the jury, and the applicable principles were discerned entirely from statutes and other findings of law.

future courts. None of those are correct, and indeed no court would call (A) a statement of law.

What I am getting at with all this is that the specificity of each statement can only be determined in relation to that of another. If the bifurcation metalaw defines 'fact' and 'law' in relative terms, it can only do so effectively if there are only two layers of abstraction involved in the resolution of legal dispute. That is not true. But Anglo-Saxon legal process does distinguish between facts and laws for purposes such as appeals, the allocation of adjudicative competence between judge and jury, and precedent. Therefore, the bifurcation metalaw is effective, in that it exists and influences the law in both form and substance, but it is not based on relative specificity. Consider, now, all the statements I just used as examples together, ordered from the specific to the abstract:

- (E) John fired a bullet through Mary's head.
- (A) John killed Mary on purpose.
- (B) Murder requires intent to kill or cause grievous bodily harm
- (C) Murder is a criminal offence.
- (D) Article 2 of the European Convention of Human Rights imposes an obligation to protect human life on its signatory states.

Statements (E) and (A) are statements of fact in actual procedure. They are neither subject to appeal nor binding on future courts. Questions (B), (C), and (D) are obviously statements of law. They can be appealed and they bind future courts. The line of bifurcation is thus somewhere between (A) and (B). Why is it there and not elsewhere? The reason, as seen, cannot be their relative specificity. It is much more realistic to say that the boundary between law and fact is chosen for instrumental reasons: we want some findings to be binding and others to be non-binding, we want some to be appealable and others not, and, as discussed at length in the preceding chapter, we want some to be subject to the trier of fact's discretion and others to be deduced rationally from first principles. When we say that something is a law, we mean that the system treats it in a certain way. When we say that something is a fact, we say that the system treats in a different way.

This is unproblematic so long as we know how the system treats a particular statement. This is true of the examples just used and also of many others. There are some statements, however, which the justice system treats inconsistently. Moreover, since the concern here is with legal change, it is obviously impossible to tell how some statement will be treated before the content of that statement is known. We cannot say, in the abstract, whether some specific question should or should not be subject to appeal, or binding on future courts, and so on. The bifurcation metalaw does not provide a precise criterion through which to determine, for every conceivable question, whether that question is one of law or one of fact. In this sense, the bifurcation metalaw is not very useful. A perfectly exact definition of 'law' and 'fact' would be optimal.⁶⁷ But between the two there is no nomogenic difference. A law is simply a fact about the state's coercive machinery. Any

⁶⁷ Strictly speaking, a relativity-based bifurcation metalaw is a metastandard, and one based on absolute definitions would be a metarule. Since I argue that a metarule is unattainable, I do not discuss the difference at length here – the reader is referred to Chapter 7.

definition must be to some extent artificial and therefore inexact. Either some issues must be classified as both fact and law or some issues must be neither.⁶⁸

The point that the fact-law distinction is inexact is readily borne out in practice. I will very shortly give examples. However, I think it is best to begin from premises whose classification is straightforward. The most general statement that can be used in adjudication is presumably the constitutional text of the legal system. The most specific would be a description of the position of all atoms in the universe. Between the two lies a spectrum. The bifurcation metalaw bisects that spectrum at a point whose location we can only guess. Consequently, statements that are very close to one of the two extremes are easy to classify. No judge would equate the constitution to his own views on good governance. Conversely, an appeals court will seldom, if ever, upset a trial judge's holding that some witness is untrustworthy, or that some defendant was in such-and-such place at such-and-such time, or that a car was exuding fumes in the aftermath of an accident.

Closer to the bifurcation line, problems of classification are usually still solvable or at any rate manageable. Recall that our system is predominantly rationalistic. The adjudicator first establishes the law and the facts. He then applies the law to the facts. Or he shows that the facts fit the law.⁶⁹ The last step of the analysis must always be deductive. That last step, being at the intersection of law and fact, is also most likely to lie on what I called the bifurcation line. It is tangent to the most concrete law and to the most general fact. Because of this, it is difficult to classify that step. It is difficult to tell whether the application of law to fact is an exercise in law or one in fact.⁷⁰ Nonetheless, there are two instances in which application poses no practical problem. The first is where the ultimate representation of the facts is commensurate with the last possible deduction of law.⁷¹ The second is where the facts correspond essentially to the 'core' of the law.⁷² In both cases, the only permissible logical operation is a deduction. Its classification, then, becomes unimportant.

Application does, however, pose problems when there is neither commensurateness nor essential correspondence. If one reasons from the top of the inferential network, the perplexity may be described thus: inference leads to a point where there are insufficient external premises to deduce a law which covers the facts. If one reasons from its bottom, the issue is that no permissible subjective representation of the facts can serve as a minor to the legal major. The criterion of reasonableness is in this respect emblematic. No

⁶⁸ The practical effect of the two is the same – if the system tells us to apply laws to facts and says that A is a law, B is a fact and C is both, we do not know whether to apply A to B and C or A and C to B. If the system tells us that C is neither, then we again have to choose between applying A to B and C and applying A and C to B.

⁶⁹ Dickinson, J., 'Legal Rules: Their Application and Elaboration' (1935) 79 UPLR 1052, 1060-6

⁷⁰ The issue appears even to refract the light of the brightest suns on the juridico-economic firmament: see *United States of America v McKinney* (1990) 919 F2d 405, 419 per Judge Posner.

⁷¹ This is the situation, for example, when on the legal side there is a statute which stipulates that 'anyone who drives a car at a speed in excess of 50 km/h shall be liable to a fine of £100' and on the factual side there is evidence that 'John drove his car at 60 km/h'. The application exercise is reduced to a simple task of comparing two representations of speed that use the same unit of measurement.

⁷² This is the situation where the law only prohibits speeding in 'urban areas' and there is compelling evidence that 'John drove his car at 60 km/h in Central London'. 'Urban areas' and 'Central London' are not units of measurement, but it is simply not possible to conjure a meaning of the phrase 'urban area' that does not include Central London.

statement of the facts of a legal controversy can indicate conclusively whether human conduct is reasonable unless it includes the word 'reasonable' or a synonym thereof.⁷³ If the interpretation of reasonableness in adjudication is phenomenologically intentional, and I think I do not stretch the reader's credulity when I assume it is, then it must involve some additional premise which is internal to the judge. But if the objective dominates the subjective, the application of law to fact must be based only on external premises.

The system overcomes this difficulty by classifying some questions as ones of 'mixed law and fact'. For all issues categorised thus, the requirement that the ultimate step be a syllogism is relaxed: the judge, having stated the law and the facts, announces a solution without specifying whether the intervening premise originates from the facts or the law. These observations on 'mixed' issues are fairly trite.⁷⁴ What I want to point out is that it is impossible, within those issues, to disentangle the legal elements of the solution from the ones which are factual.⁷⁵ Adjudication is discharged by statements such as 'The law is X', 'The facts are Y', "Therefore the defendant is liable"⁷⁶. To get to this conclusion, the adjudicator must have reason to believe that Y falls within the class X. For this to be the case, there must be at least one additional premise. The bifurcation metalaw mandates that Y is more specific than X. Therefore, the intervening premise must be less specific than X but more general than Y. If this right, then it must never be possible to classify the

⁷³ This is not to say that there are no more specific legal premises, but they are usually exclusionary and insufficient. For example, reasonable man is said not to be the average man, not to break the law, not to necessarily be virtuous, and so on. Suppose that it is known that 'if X is not reasonable, X is liable', 'reasonable men never break the law', 'John forgot the date of Joanne's appointment', 'It is not against the law to forget an appointment'. It is not possible to conclude from these premises whether John was reasonable or not. The 'legal' premises in a mixed issue serve as binding external constraints on the subjectivist evaluation of the facts. Thus if the defendant drove at 60 km/h in Central London, the premise 'everyone does it all the time' cannot be used to determine the overall reasonableness of his conduct because the reasonable person is not the average person and does not break the law.

⁷⁴ The debate over determining whether 'mixed' issues are *really* issues of fact or issues of law seems to have been considered moribund as early as 1966: Weiner, S., 'The Civil Jury Trial and the Law-Fact Distinction' (1966) 54 California LR 1867, 1874ff. It is generally acknowledged that the area is problematic, but no concrete solution has been found (Isaacs, M., 'The Law and the Facts' (1922) 22 Columbia LR 1, 11). At present, Judge Posner believes that any attempt to classify the application of law to fact as one or the other is 'absurd' (*United States of America v McKinney* (1990) 919 F2d 405, 419) and there are dicta from the highest authority in England to the effect that the application of law is neither fact nor law – see *Griffiths v JP Harrison* [1963] AC 1.

⁷⁵ The problem arises, as will be seen shortly, only in the context of legal change: in the context of a single incident of litigation, it is largely irrelevant. The only major issue that can (and does) arise is whether the appellate court has jurisdiction to upset a 'mixed' finding. The test used in England allows the appellate court to make a 'gestaltist' assessment of the degree of 'law' and 'fact' in the issue, and if there is a 'strong' element of law, then it will review the finding. (*The Rio Claro* [1982] 2 Lloyd's Rep 173). A concrete attempt to distinguish between factual and legal elements in mixed questions was made in *British Launderers' Association v Hendon Rating Authority* [1949] 1 KB 642, but the holding was that the distinguishing characteristic of a legal inference is that it can only be made by a trained lawyer (at 471-2 per Denning LJ as he then was). So far as legal training is generally concerned with imparting the ability to make inferences from laws, this is clearly a circular definition.

⁷⁵ E.g. 'The law requires people to act reasonably', 'The fact is that John forgot to check

⁷⁶ E.g. 'The law requires people to act reasonably', 'The fact is that John forgot to check if Joanne was allergic to nuts', 'Therefore, John did not act reasonably'.

intervening premise itself as law or fact. It can only be said that it is more specific than the most specific law and more general than the most general fact.⁷⁷

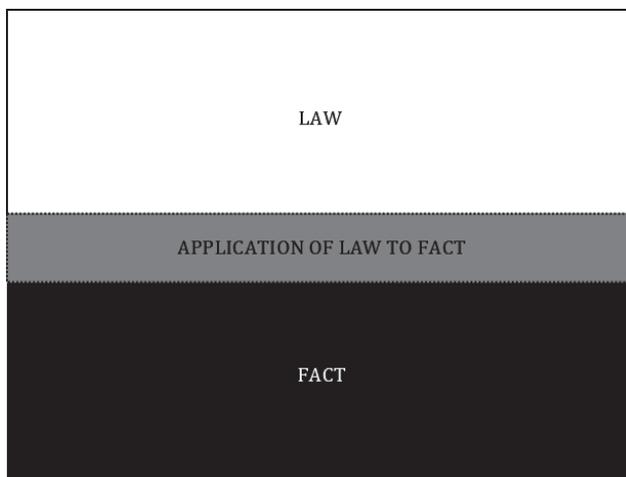


Figure 3: The Relationship between Law, Fact, and Application

⁷⁷ An alternative method of determining the nature of this intervening premise would be by proxy, that is, by reference to either its origin or to the mediation techniques to which it is amenable. It will be recalled that the modern system is mixed, that 'law' refers to the rationalist segment of the system and 'fact' to the subjectivist. One would therefore expect that if the intervening premise is 'law', then it should be given *a priori* and it should be possible to infer that Y belongs to X by deduction. Conversely, if the intervening premise is 'fact', then it should originate from the adjudicator's subjective perception of the world and it may be linked with the conclusion that Y belongs to X in any manner that satisfies the very loose requirement of intentionality. This is however circular. If there is an additional legal premise, then X cannot truly be the last deducible law. If it is possible to generalise further through gestaltist means, then Y cannot be the most abstract fact. If either is true, then, there is no real 'mixed issue'. The position is different under institutional bifurcation: see Thayer, A., *A Preliminary Treatise on the Law of Evidence* (1898 LB) 183-9 cf Morris, C., 'Law and Fact' (1942) 55 Harvard LR 1303, 1312-3. Another alternative method is to say that laws are prospective and facts retrospective – the possibility is discussed in Bohlen, M., 'Mixed Questions of Law and Fact' (1924) 72 UPLR 111, 112; Friedman, R., 'Standards of Persuasion and the Distinction between Fact and Law' (1992) 66 NWULR 916, 918; Morris (fn 77) 1329. This meets an immediate objection, in that T some 'facts' are genuinely prospective: judges are routinely asked to consider the consequences of, among others, medical procedures (*Re A* [2001] 2 WLR 480), foreign proceedings (*Spiliada Maritime v Cansulex* [1987] AC 460), and media publications (*Hutcheson v News Group Newspapers* [2011] EWCA Civ 808). This need not, however, be fatal to the argument, so long as in the main it is true that laws generally specify future sanctions that are applied once certain events have already transpired, that is, once the facts are historical. A more profound difficulty with drawing the distinction along temporal lines arises from the conditionality of prospective rules. The temporal argument presupposes that the law is expressed as something akin to 'Anyone who has committed murder shall be liable for a penalty of life imprisonment' and that facts are expressed as 'X killed Y on purpose'. These statements can co-exist safely within a single legal order, and one is clearly law while the other is clearly a fact. Furthermore, the statement of the law does contain a reference to the future and the statement of the fact does not. However, the law also includes an antecedent condition of liability. The underlying idea here, coming from M. Knight (tr). Kelsen, H., *The Pure Theory of Law* (1960 UCP), is that laws can be expressed as 'If M, N, and P are true, then a sanction can be imposed on X'. This of course does not do justice to the complexity of Kelsen's jurisprudence on this point. For a fuller treatment, see Kelsen, H., Litschewski, P. & Paulson, S. (tr), 'An Introduction to the Problems of Legal Theory' (Clarendon 1992) 4ff. The sole difference between those conditions and the 'facts' is specificity – which brings us full circle.

For expositional convenience, I represent this point graphically. Here, law, fact, and application are ordered from the general to the specific. Law, being more general than fact, is at the top. And fact is at the bottom. The process of applying law to facts can be classified as neither fact nor law, or as a bit of both. It occupies the grey area between the two.

II. A Model of Legal Judgments

What I have tried to show thus far is that the bifurcation metalaw is necessarily a metastandard rather than a metarule. It is not infinitely precise. It has a core and a penumbra. "Mixed issues of fact and law" lie in that penumbra. There is still quite a lot of ground to cover until it can be shown that the imperfections of bifurcation drive legal change. To make that point, I must first show that the penumbra is liable to be manipulated in a particular way. To get a step closer, I propose now to discuss the tool through which judges in precedential systems manipulate penumbræ and the law in general, namely legal judgments.⁷⁸ In describing the structure of judgments, I will proceed from statements that pertain to 'fact' to statements that pertain to 'law'.⁷⁹ Thereafter, will I discuss statements which describe the application of one to the other.

1. Factual Statements

The most specific category of statements that may be contained in a judgment are those of evidentiary fact. A statement of evidentiary fact is a verbal description of some item of evidence, or oral testimony, or personal experience of the judge.⁸⁰ Examples include statements such as 'a document signed by the defendant was presented to me in the course of these proceedings', 'the witness said that he saw the defendant enter the house at 5 o'clock', or 'I noticed that the defendant blushed'.

A statement of ultimate fact is a generalisation from evidentiary facts which the judge assumes to be correct for the purposes of the adjudication.⁸¹ Examples include 'I accept that the defendant entered the house at 5 pm', 'it has been proven that the signature on the contract is that of the defendant', and 'the defendant was driving his car at 60 km/h on Wednesday'.

⁷⁸ It is worth noting here that if trial is by jury and mixed issues are for the jury, the problem is avoided. Evidently, so is the conversion of standards into rules through precedent to which the literature alludes. Given the decline of jury trial in the last century, the analysis developed here likely covers the majority of non-criminal trials.

⁷⁹ The reader might find the discussion of purely legal and purely factual statements redundant, so far as the substantive point of my paper only relates to 'mixed' issues. However, I do not think it would be possible to speak of applicative statements without a general model of the thing which is being applied or the thing to which it is being applied. I have, however, tried to keep the discussion of factual and legal statements as short as possible.

⁸⁰ Morris (fn 77) 1326. The jury's reasoning is not recorded, so that even though such statements are used to reach a conclusion, they cannot constitute precedent: see n 78.

⁸¹ *Ibid*

The derivation of ultimate facts follows what I earlier called the subjectivist paradigm. As Professor Wilson notes, the ultimacy of a fact depends on whether the evidence establishes it as a matter of truth, probability, and description.⁸² It is possible to establish the truth, probability, and descriptive correspondence of two statements deductively⁸³, but the evidentiary facts will seldom be sufficient.⁸⁴ For this reason, it is also possible to derive ultimate facts through perceptual premise-mediation techniques. This will be the case when a statement such as ‘I did not find X a credible witness because of his uncooperative attitude’, or ‘I do not find it credible that the defendant entered the house because he believed it was his’, is made. There is no strict logical reason to believe that a person is uncooperative because he is lying. That is merely one of several conceivable explanations. But since the information before the judge is scarce, he may do no better than abduct to the likeliest explanation. Another way of saying the same would be to point out that the judge is operating under a standard which instructs him to discover truth ‘on the balance of probabilities’ or ‘beyond reasonable doubt’ but which contains no specific instructions on the type of reasoning techniques which he may use to achieve that goal. Therefore, he has a discretion. Likewise, if someone claims to have held a certain erroneous belief, that assertion will generally be unverifiable. The best the judge can do is to determine its truth or falsity by reference to hunches, intuitions, and other subjective notions.

2. Legal Statements

Not all laws are equally specific. I call general laws majors and specific ones minors. In England, it is correct to say that ‘murder carries a penalty of life imprisonment’ – a major. It is also correct to say that ‘murder is the unlawful killing of a human being in the Queen’s peace with malice aforethought’ – a minor. If we apply the rules of formal logic to these statements, we may conclude that ‘the unlawful killing of a human being in the Queen’s peace with malice aforethought carries a penalty of life imprisonment’. If we are given no further premises, this is the most specific description of the conditions in which the state may deploy its coercive powers against individuals. For brevity, I call these sanctionability conditions ‘final laws’.⁸⁵

⁸² If Witness A says that Statement X is true, Statement X is an ultimate fact if Witness A is truthful. If Witness A says that Statement X is true, this is accepted, and Statement X is associated with Statement Y with some probability, Statement Y is an ultimate fact. If Witness A says that Statement X is true, this is accepted, and Statement X can be described as Statement Y, then statement Y is true.

⁸³ It can be shown, by using pure logic, that it is true that if a plus b equals c then a equals b minus c. It can also be shown that a fair dice will produce an even number with a probability of 0.5. It cannot be shown categorically that a dice is a square object, because any description is couched in human language and to at least some extent subjective. Logic may however play a part in the process where there is more than one equivalence: if we say that a dice is always a square object and that a square object is always solid, then it necessarily follows that a dice is solid.

⁸⁴ See Damaska, M., ‘Rational and Irrational Proof Revisited’ (1997) 5 CJIL 25.

⁸⁵ In assuming this, I believe I am not falling into the formalist trap of treating all law as a deductive operation. At this stage, I do not say anything about the manner in which the judge formulates the definitions and principles that he uses: it will be seen shortly that it is possible for him to do this in a ‘neutral’ manner (which does not presuppose that they are always given either), or that he can manipulate the ones that are available to achieve some instrumental purpose. I am also very far from excluding the possibility that in order to demonstrate the

A fallacy lurks in my terminology, in that it might imply that the legal system comprises at most two layers of specificity. I do not intend to say that – what is a minor relative to one statement may be a major in respect for another. For example, the minor above is a major relative to ‘malice aforethought means intention to kill or cause grievous bodily harm carries a penalty of life imprisonment’. All I wish to denote is the idea that, through the alternation of majors and minors, it is possible to derive a statement of the conditions in which the state will deploy its coercive machinery. Likewise, ‘murder is a crime that carries a penalty of life imprisonment’ was a major above, but it is a minor relative to the more general ‘crimes are punished’. In general, it should be possible to trace the whole process upwards on the inferential tree, all the way to a *Grundnorm* which identifies the source of the obligation, or to a rule of recognition that explains why members of the polity generally obey it.⁸⁶ Since that inferential process is cognitively uneconomic, however, judges generally begin the analysis from some statement which is closer, in terms of specificity, to the facts. Many of the more general premises remain implicit.

3. Applicative Statements

I said that the adjudicative process is completed through the discovery of the intersection between law and fact. One purpose of recording judgments is to demonstrate that this intersection was discovered in accordance with the laws and metalaws of the system. In a predominantly rationalist system, those laws and metalaws will dictate that the intersection be described in the form of a syllogism in which the final law is a major premise and the ultimate fact a minor one. If there exists a final law which is commensurate or essentially correspondent with an ultimate fact, this is unproblematic. If the law refers to a ‘car’ and the facts to a ‘Vauxhall Vectra’, the deduction is automatic: law and fact correspond to each other essentially. Likewise, if the sanctionability condition is ‘over 50 km/h’ and the ultimate fact is ‘55 km/h’, the two are commensurate and application is straightforward. The dispositive statement of the judge will merely note down the syllogism. I will call this type of applicative statements correspondent.

The judge can also say that the ultimate fact lacks some essential characteristic which is required by the final law.⁸⁷ I will refer to this type of statement as exclusionary. For example, if the law refers to a ‘car’ and the facts to a ‘carriage’, the controversy may be solved by saying that a carriage lacks the essential feature of engine propulsion. Note that we cannot know whether that premise is legal or factual. It may be that the judge is holding that engine propulsion is an essential characteristic of cars, or that he is declaring that a carriage is not a car because it does not have a motor. The two mean the same for the outcome of the adjudication, but one introduces a legal premise and the other a factual one. One solves the case by squaring the facts to a fixed law, the other by squaring the law

validity of some major or minor, the judge will infer rules from previous cases, or that he will draw analogies, and so on.

⁸⁶ Hart (n 62)

⁸⁷ Wilson, W., ‘A Note on Fact and Law’ (1963) 26 MLR 609, 616

to the fixed facts. It is unproblematic, within the context of a single case, if the judge purports to do both, or if he omits to say what it is that he is doing. But as we will see, there are long-term implications for legal change.

A judge may also hold that a certain characteristic does not exclude the ultimate fact from the class of objects given in the final law. If the law refers to a 'car' and the facts to a 'car with no tires', the court may hold that the lack of tires does not deprive the object of its essential nature.⁸⁸ I will refer to these statements as inclusionary. It is again unclear if the lack of tires relates to the vehicle of the facts or the car of law.

Judges can also hold that the ultimate fact's aggregated characteristics subsume it under the final law. I will refer to such statements as gradational. Gradational statements are common when the final law contains criteria such as reasonableness, sufficiency, necessity, or proportionality.⁸⁹ The law may speak of a 'car' and the facts of a 'a vehicle outfitted with an engine but without tires, used as decoration in the defendant's public house'. The court may hold that the elements of this description, taken in their totality, mean that the object in question is a car. When the court does this, it is impossible to tell which of the elements is consistent with the status of a car and which is not. Nor can a reader tell how each element is weighed against the others. And, like in other applicative statements, it cannot be said whether any one of the constituent elements pertains to 'law' or 'fact'.

I move to fatten the diagram which I introduced in the previous section with the types of statements that I discussed here.

⁸⁸ *Ibid*

⁸⁹ *Ibid* 617

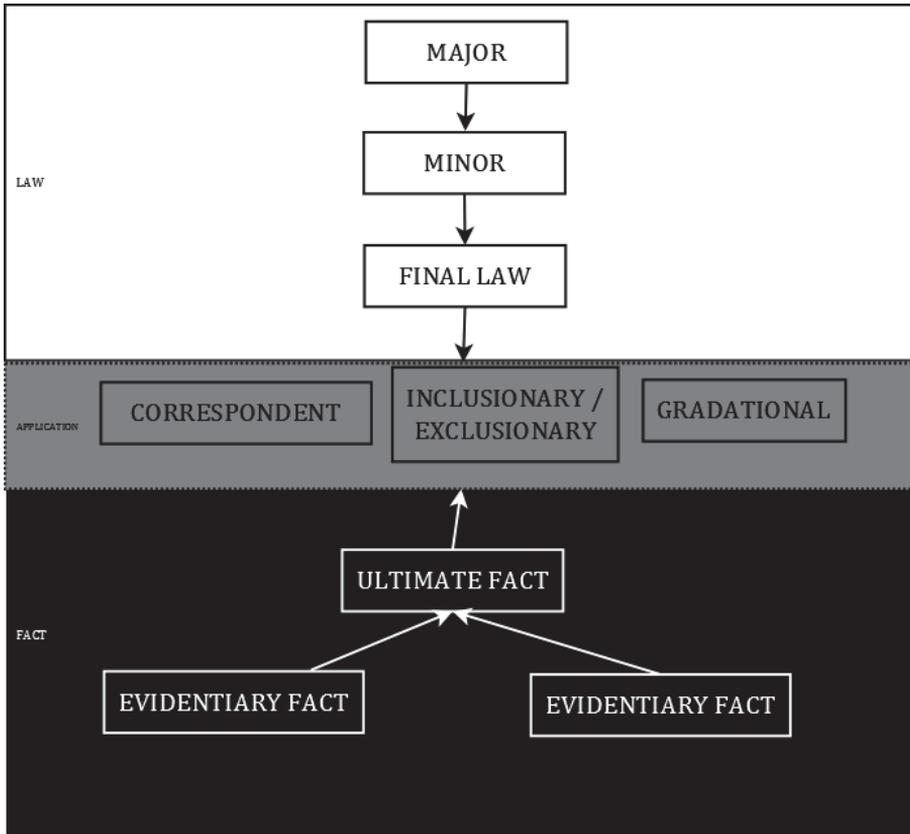


Figure 4: The Relationship between Legal, Factual, and Applicative Statements

As before, the elements are ordered by specificity, from top to bottom. The reader will note that, in the legal part, the judge reasons ‘downward’, that is, he infers specific premises from the general ones he is given. In the factual part, the reasoning process is ampliative – general propositions are drawn from specific evidence. Application is again more general than the facts and more specific than the law – an applicative statement might be both an ‘upward’ generalisation from the facts or a ‘downward’ deduction from the law.

4. Applicative Uncertainty

The last concept which I want to sketch out is legal uncertainty. I schematise it along positivist lines. Every law has a core and a penumbra. The core-penumbra dichotomy is a metaphor which captures partial linguistic indeterminacy. Consider the English word ‘box’. All speakers of the English language would agree that when this word is spoken or written, it can signify a container with a lid, such as a lunch box. ‘Lunch box’ thus falls in the core of the definition of ‘box’. Conversely, the word ‘box’ can never mean ‘dog’ – it is

simply the case that no speaker of the English language would understand the former to signify the latter. Thus 'dog' falls wholly outside the definition of 'box'. The word 'box' can also mean 'a gratuity given to a tradesman on Christmas'. Some, but certainly not all, speakers of the English language use it in this way. Whether there is equivalence between 'box' and 'a gratuity given to a tradesman on Christmas' is thus not always clear. This third use therefore falls outside of the core but inside the penumbra of the concept of a 'box'.

Now suppose that it is necessary, as it often is, to define 'box' so that some other speaker can use that word consistently and clearly. The only way to provide an exhaustive description of its meanings would be to list all of its potential uses in context.⁹⁰ That is likely to be uneconomic, for the same reasons as writing an infinitely precise rule. Instead, we use general definitions. Those general definitions reduce the uncertainty of a concept without, however, eliminating it entirely. Some meanings are included within the definition, others are clearly excluded, and the status of others still is unclear. Every definition retains some of the ambiguity of the term which it defines. The ambiguity, or the width of the penumbra, can be reduced by providing a more specific definition. But it can only be eliminated completely if the definitions are made so specific as to be identical to the totality of uses of the word. But that would be the realisation of the very diseconomy that we avoid when we use definitions.

The parallel with laws is I think obvious. For every law, there exists a class of situations which can safely be said to trigger its application. There are also cases which obviously do not engage it. A Vauxhall Vectra is always a car and never a proportionate response. The penumbra of a law, on the other hand, comprises those factual patterns whose correspondence to the general standard is unclear. It is difficult to say whether, for example, driving a car while intoxicated⁹¹ is a proportionate response to a threat of serious injury, or whether killing one Siamese twin is justified to preserve the life of the other⁹².

I now want to note three features of the core-penumbra dichotomy. All three follow from the proposition that the meaning of a lexicological unit can only be captured by observing its uses.⁹³ First, it is not possible to tell with any degree of certitude where the core of a law ends and where the penumbra begins.⁹⁴ In law-and-economics terms, it is impossible

⁹⁰ It is worth noting here that the totality of the meanings of a given word is at any one point fixed. Thus if the size of the penumbra increases, the core shrinks, and vice versa. The assumption is that the usage of the word controls the definitions, not vice versa.

⁹¹ *R v Kitson* [1955] 39 CrAppR 66

⁹² *Re A* [2001] 2 WLR 480

⁹³ Wittgenstein, Anscombe, G. (tr), L., *Philosophical Investigations* (Oxford 1953) 11.

⁹⁴ This is so because, as will be recalled, the rule has been drafted in general terms precisely because it is too expensive to specify all situations that follow within it. It must be true then that it is also prohibitively expensive to specify all of the uses of the rule as a lexicological unit – otherwise it would be drafted at a higher level of specificity.

to tell whether some law is a rule or a standard if it is viewed in isolation.⁹⁵ Second, it is nonetheless possible to say that a given law has a wide penumbra relative to another.⁹⁶ It remains possible to tell whether a law is a rule or a standard if it is put next to another law that regulates the same activity. Third, if some fact falls in the penumbra of law, the question of their correspondence can only be resolved through some additional, defeasible premise.

The last feature is the most critical to the present ends, and I will triturate it at some length. The concept of defeasibility⁹⁷ may be familiar to the mathematically-minded reader as non-monotonicity. It is in my view best conceptualised thus: in deductive reasoning, the addition of premises cannot result in the retraction of a conclusion. If we are first told that 'All boxes are containers' and that 'All lunch boxes are boxes', then it follows that 'All lunch boxes are containers'. Thereafter, if we are told that some lunch box is green, rectangular, or dirty, this does not alter the truth of the initial conclusion. Another way of saying this is that the reasoning here is monotonic, or indefeasible. Conversely, in everyday non-deductive reasoning, conclusions can be changed on the basis of new information. Suppose that we are told that 'the container contains food' and that 'the food was placed in the container this morning'. One likely explanation is that the container in question is a lunch box. Suppose that we are later told that 'the container weighs two tonnes' and that 'the food is only suitable for consumption by farm animals'. Given this additional information, we may now reach the opposite conclusion, namely that the container is not a lunch box. This type of reasoning is defeasible, or non-monotonic.

Suppose that an arbiter is asked to say whether when someone said 'box', they meant 'a gratuity given to a tradesman on Christmas'. Since the general truth of the proposition is unclear, to discharge his task the arbiter must use some additional premise. Suppose further that he answers that the two are equivalent because that is the accepted usage in British English. The additional criterion is thus 'British usage'. Suppose, next, that thereafter the arbiter is informed that the word was in fact used by a Canadian speaker in the context of the carriage of goods by sea. He would then surely have to revise his initial conclusion. The same would evidently be untrue if the arbiter had instead been asked to say whether 'a lunch box' is 'a box'. In the latter case, no amount of contextual information could alter the arbiter's answer. In the carriage of goods example, the problem falls within the penumbra of the word 'box'; the lunch box example lies within its core.

⁹⁵ Kaplow (n 58) 561

⁹⁶ This results from the number of potential uses of a lexicological unit. 'Over 50 km/h' can be used in fewer instances than 'unreasonable'. As a result, there will be fewer instances in which users disagree on the meaning of 'over 50 km/h' relative to the instances in which users disagree on the interpretation of 'unreasonable'.

⁹⁷ Hart, H., 'The Ascription of Responsibility and Rights' (1949) 49 PAS 171, 174-5

Legal statements⁹⁸ are analogous to dictionary definitions. They define and refine a core. So long as their function is thus confined, they are indefeasible. If it is said that ‘murder is a crime’ and that ‘murder is intentional killing’, then it is true that ‘intentional killing is a crime’. We may add that murder is a sin, or that it is unpleasant to witness, or that it can be done on impulse, but this cannot alter the original conclusion. Conversely, factual reasoning is generally of the practical, non-monotonic variety. The evidentiary fact that ‘a document was presented to me bearing the signature of the parties and some terms’ may lead us to abduct the ultimate fact that the document is a record of an agreement. If it is later shown that both signatures were produced by the same party, then that conclusion can be altered.

How does the core-penumbra dichotomy fit with the model of legal judgments that I built earlier? When a judge makes a correspondent statement, he observes that the ultimate fact falls within the core of the final law. When he makes an inclusionary, exclusionary, or gradational statement, he is dealing with an ultimate fact which is penumbral relative to the final law. A correspondent statement registers the existence of an obvious syllogism such that the controversy can be disposed of. Conversely, the other three types of applicative statement refer to characteristics of either the facts or the law. Since the characteristics in question *might* be factual, it might be permissible for future judges to reason about them as if they were defeasible. But since they might also be legal, it is also possible that they are indefeasible, and must be treated by others as forming part of a syllogism.⁹⁹ The potential defeasibility of each statement goes a great way to undermine its usefulness as precedent. As will be seen shortly, it causes applicative uncertainty to increase.

This can be framed within the diagram which I adopted earlier:

⁹⁸ I say ‘within a judgment’ because that is the point at which the judge must decide that there is one and one only version of the legal system which is applicable to the case: it is not generally possible for a judge to claim that two radically inconsistent rules co-exist and apply to the same situation, since he would then have to reach opposite outcomes. The same is not true outside of the context of a judgment because some rules are unclear so they may be said to mean two things simultaneously. It is also possible for the rules to be changed under the guise of ‘discovering’ new precedent. On formalism and realism, see the text at fn 85.

⁹⁹ It is perfectly possible, within the same proceedings, to say that a donkey is not a car because it does not have wheels, that a minivan is a car because it has an engine, and then to say that a motorcycle is not a car even though it has wheels and an engine, say because it does not have a roof. The criteria that the judge uses, such as the presence of wheels or roofs, are not necessary and sufficient conditions: that a given object fulfils one criterion does not show absolutely that it falls within the definition

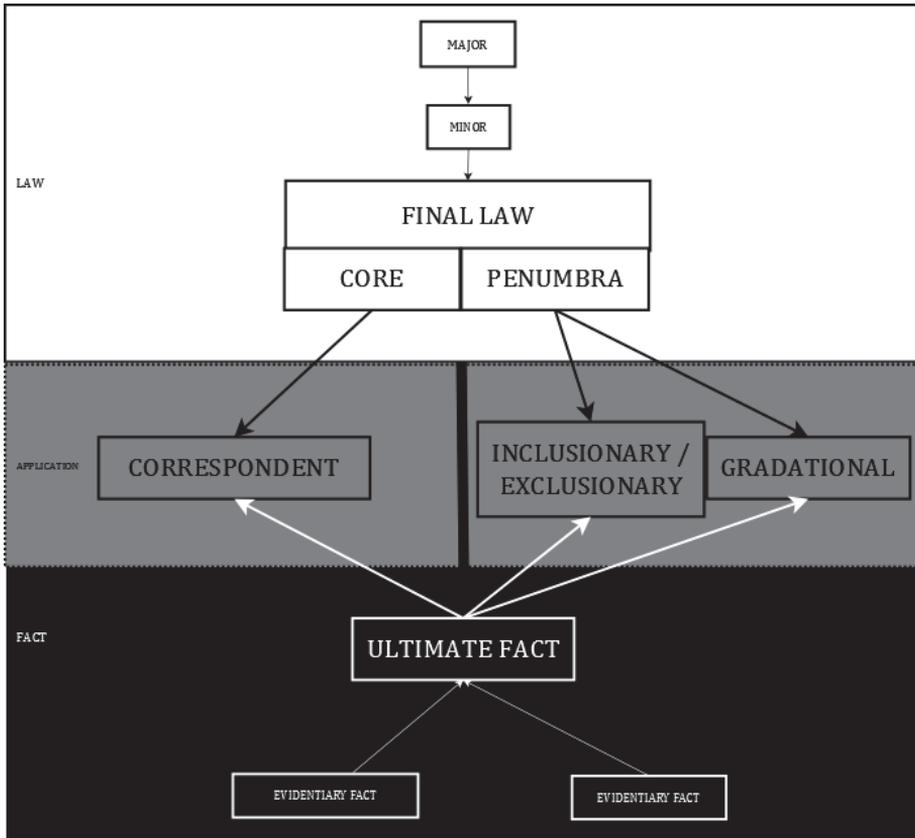


Figure 5: Legal, Applicative, and Factual Statements and their Relationship with Uncertainty

It is now possible to finalise the diagram. The final law which the judge derives is, like all language, vague.¹⁰⁰ It has a core and a penumbra. When the final law is applied to facts, those facts might fall within its core. In that case the adjudication will conclude with a correspondent statement. Alternatively, the facts may lie in the penumbra of the final law. In that case, a gradational, inclusionary, or exclusionary statement will be necessary. The critical point is that when the judge uses a gradational, inclusionary, or exclusionary statement, we do not know if he means that statement to be defeasible or indefeasible. This depends on whether in making the statement, the judge is explaining the law or the facts. It is this feature of the system that makes it uncertain.

¹⁰⁰ That is not to say that all human language is equally vague. There is obviously a world of difference between ‘everyone must drive reasonably’, a standard under which the legality of most driving would be open-textured, and ‘every must drive at a speed below 50 km/h in cities’, under which virtually all assessments of legality are mechanical. Note, however, that even the second law is *partly* vague: for example, we might dispute what constitutes a city or what it means to drive or, more esoterically, what 50 km/h means.

III. The Mechanism of Legal Change

I have so far said two things. The first was that the bifurcation metalaw must be a bifurcation metastandard. It has a penumbra. Some statements cannot be classified as either fact or law. The second was that judgments have a structure in which statements can be arranged from the abstract to the specific. Within that structure, there are statements which might be difficult to classify as either fact or law. If these propositions are accepted, then it is also true that the application of standards to facts *might* result in uncertainty whenever it is unclear if that application is legal or factual. What remains to be demonstrated is why those statements do propagate within the law, and how they cause legal change. It is to that task that I presently turn. The point, in brief, is this: when making applicative statements in a penumbral case, the judge uses premises which are potentially defeasible. The potential defeasibility of those premises can be used strategically both by the judge himself and by subsequent judges. Even if the judge is not activist, he might still find himself forced to introduce potentially defeasible whenever the facts before him are penumbral. With the recurrence of penumbral cases, the number of potentially defeasible statements within the law grows. So does applicative uncertainty. Eventually, it becomes desirable to switch to a new law.

My argument is based to some extent on rational choice theory, so it is best to begin by laying bare my assumptions. I assume that the requirement of justification is what generates the cost of changing the law for the individual judge.¹⁰¹ The judge must normally write an opinion which contains both 'fact' and 'law'. He must also show that each adjudicative premise was sourced and analysed correctly, and that the facts were treated as being subordinate to the law.¹⁰² If he wants to change the law, he must write an opinion which shows that the current state of the authorities is dissatisfactory. This is costly because the arguments are visible to the rest of the juridical community – if they are found unpersuasive, they will be rejected.¹⁰³ The need to write persuasive normative

¹⁰¹ This assumption is identical to the one in Ponzetto, G. & Fernandez, P., 'Case Law versus Statute Law: An Evolutionary Comparison' (2008) 37 JLS 379.

¹⁰² In assuming that such a 'neutral' solution exists, I am positing that the law is not radically indeterminate. This is similar to Dworkin, R., 'The Model of Legal Rules' (1967) 35 UCLR 14. The point is fairly straightforward when there is a clear deductive method of solving the case. It is less clear when the adoption of two different and equally valid premises would lead to opposite outcomes. Dworkin in this respect argues that the judge can take the totality of the norms in the system and derive from them an impression of the 'correct' approach to be taken. This proposition has been attacked (e.g. Grenawalt, K., 'Discertion and Judicial Decision: The Elusive Quest for Fetters that Bind the Judge' (1975) 75 Columbia LR 359). Note that Dworkin argues that the judge is under a *duty* to reach this outcome, and that he appears to argue that it is possible to reach a single outcome through this process. (See further Wolcher, L., 'Ronald Dworkin's Right Answers Hypothesis through the Lens of Wittgenstein' (1997) 29 Rutgers LJ 43). I neither wish nor need to go this far: my only supposition is that a judge can *try* to be neutral, that is, that he can try to exclude his innate biases for the purpose of reaching judgment. This does not exclude the possibility that two judges doing this will reach opposite conclusions.

¹⁰³ If a judge openly considers his views to be more important than the law, those judgments are unlikely to be followed. And the success of any attempt to change the law ultimately depends on the acquiescence of other judges. If a judgment lacks basic components or if it is blatantly subjective, it is unlikely to be affirmed on appeal let alone followed in subsequent litigation. Of course, the extent to which this is true ultimately depends on the position of the judge within the hierarchy: a pronouncement in the Supreme Court will, for instance, always be followed. And it is also the case that different precedential systems exhibit different degrees of tolerance for

arguments does not arise when the judge merely applies the existing law. Consequently, we may say that the cost in question is the cost of attempting to change the law.

Under this assumption, it is possible, by applying all the system's laws and metalaws, to arrive at an objective solution which is independent of the subjective preferences of the human agent tasked with resolving the dispute. The judge in any one case may resort to this objective adjudicative method. He may also act with a view to satisfying his personal ideological preferences. The latter approach involves some departure from neutrality. The costs of departure to the activist judge depend on other judges' ability to detect it. It was seen that the visibility and identifiability of a premise depend, in a mixed system, on its position on the specificity spectrum. If visibility corresponds to cost, then the less visible the premise, the lower the cost of manipulation.

For expositional convenience, I will first demonstrate how the process might be expected to occur if there are activist judges within the judiciary. Thereafter, I will show that the result is the same even if all judges are entirely indifferent between individual outcomes and wholly agnostic about public policy.¹⁰⁴

1. Change at the Core

In the previous section, I said that every law has a core and a penumbra.¹⁰⁵ When a judge wants to change a law, he can choose between two options. First, he may seek to explicitly amend an existing major or minor in order to reformulate the core. Second, he may seek to enlarge or shrink the core of the law by manipulating its penumbra.

To change the core of a law, a judge in a precedential system must point to some pressing normative consideration that justifies reform. This is rhetorically costly because the argument has to be accepted by a large number of monitors.¹⁰⁶ It may be desirable to state briefly how this monitoring function is exercised under a system of *stare decisis*. I will use the English version because I am most familiar with it. Suppose that the judge in question sits in the High Court. If he makes a normative argument for change at the core,

activism. The Supreme Court of the United States is one example that immediately springs to mind. Another is the Indian Supreme Court's use of Articles 32 and 39A of that country's constitution. I sadly lack the comparative knowledge that would be necessary to say something intelligent about the way in which these different attitudes impact on my argument.

¹⁰⁴ Note in this respect that the use of purely factual statements is unlikely to achieve much by way of legal change. This is so plainly because findings of fact are not binding on subsequent judges. They can, however, be used to influence the outcome of a particular dispute. If a judge is biased toward one party, for whatever reason, he may simply formulate the facts in a manner which makes his desired finding inevitable. This technique is particularly effective where the matter turns on issues of ultimate fact, which can be derived subjectively without violating any of the system's constraints. If a rational judge wishes to favour one party in a dispute, he may easily do so by manipulating factual statements rather than legal ones. This (conveniently) means that in the exposition that follows, I will concentrate on legal and applicative statements to the exclusion of factual ones

¹⁰⁵ See n 100 and the accompanying text.

¹⁰⁶ The costs are further augmented by the judiciary's conservative attitude to their law-making powers. The courts, at least in England, tend to leave controversial issues to the legislative branch. They are reluctant to legislate even when expressly instructed to do so: *Bellinger v Bellinger* [2003] UKHL 21.

his finding would have to be upheld by two out of three members of the Court of Appeal, and then by three out of five (or sometimes even more) Law Lords. If for some reason his finding is not appealed, it may still be reversed whenever another High Court judge applies it: the second judge's finding will be appealed, and the Court of Appeal may hold that the case which established it is bad law. If the Court of Appeal does not do so, the question may be put to the Supreme Court. And if the second holding is not appealed, the third might be, and so on and so forth. Thus the trial judge who contemplates an attempt at legal reform must persuade a relatively large number of monitors, with the attendant costs.

What is it that appellate judges monitor? When studying the opinion of another judge, the appellate court can scrutinise the logical correctness of the conclusion. It is difficult for the lower-court judge to surreptitiously insert a new major or minor into the law because the courts above will see that the proposition in question is not deducible from the pre-existing law.¹⁰⁷ To revert to an analogy used earlier, if a mathematician while proving some theorem writes that 'if $a + b = c$, then $c - b = -a$ ', then another mathematician can spot the error. Likewise, if a judge says that 'if contract requires offer and acceptance, then a contract can be inferred from behaviour consistent with the existence of a contract irrespective of formal acceptance', then another will be able to see the fallacy of the argument.¹⁰⁸

There is never a good reason to change mathematics but there are sometimes valid reasons to change laws. The monitor thus has a choice between a 'correct' neutral outcome and the adoption of a new law. He will only adopt the new law if he finds that there is some persuasive normative reason to do so. But if the monitor chooses to do so, he is himself exposed to other monitors still, who will obviously have different normative preferences from himself. Since for every judge there are at least four such monitors, a normative argument for change will very seldom succeed in changing the core.¹⁰⁹

2. Change from the Penumbra

I will now attempt to show that the other option, manipulating the penumbra, is rhetorically cheaper, at least in the ordinary run of events.¹¹⁰ I showed that the statements

¹⁰⁷ To triturate the obvious here, I say 'difficult' but not 'impossible' because the actual inferential exercise may be very complex. Even minute mistakes can trigger significant consequences.

¹⁰⁸ The obvious reference here is *Gibson v Manchester City Council* [1979] UKHL 6.

¹⁰⁹ The actual likelihood of success will depend on the ideological polarisation of the judiciary, the extent to which the new rule is different from the old, and many others. Ponzetto & Fernandez (fn 101) and Gennaioli, N. & Shleifer, F., 'The Evolution of Common Law' (2007) 115 JPE 43 are among the latest works on that subject, which I do not propose to treat extensively here.

¹¹⁰ I do not mean by this that it is *always* rhetorically cheaper to proceed from the penumbra. For example, it might be that some law has become so outdated that it is patently obvious that all judges would agree to it being changed. For example, there was an anachronism in England whereby a husband could not be convicted of raping his wife because there was an irrebuttable presumption of marital consent. That presumption dated from a time when the position of women in English society was not much different from that of chattels. The defendant in *R v R* [1991] UKHL 12 sought to avail himself of the rule. He was found guilty at the Crown Court,

which are used in penumbral cases are potentially defeasible. An activist judge can use them strategically – he may call facts laws and laws facts. When an issue is ‘mixed’, the monitors cannot exercise their function effectively because the bifurcation metalaw is vague and the premises in question are not classifiable. To the activist judge, this is rhetorically cheaper – there is no need to persuade sceptical monitors.¹¹¹

Suppose that there is in some polity a requirement that everyone should drive reasonably, and that there is an activist judge who wishes to set the speed limit at 20 km/h. A case is before him in which the defendant drove at 40 km/h. He may change the law in two ways. The first is to say openly that the reasonableness requirement should always be interpreted as ‘not in excess of 20 km/h’. That viewpoint would then have to be endorsed by the appellate and cassatory court. Since several monitors would have to be convinced, the rhetorical cost to the judge would be quite high. Alternatively, the judge may simply say that the defendant is liable because his speed was above 20 km/h. This is an exclusionary statement – 40 km/h is said not to possess some characteristic of a reasonable speed, namely being over 20 km/h. It would be unclear whether by this the judge means that the law forbids driving at a speed higher than 20 km/h, or whether he means that on the facts, 40 km/h was an unreasonable speed. Why might the activist judge prefer this? Firstly, his holding stands a much higher chance of surviving appeal – it can be interpreted as a mere description of the facts. Secondly, it also stands a reasonable chance of becoming controlling precedent – if at some point in the future another judge also believes that the appropriate limit is 20 km/h, he may say that he has authority for that proposition.¹¹² In economic terms, under ordinary circumstances,

the Court of Appeal, and the House of Lords, with Strasbourg later affirming the conviction: *CR v UK* [1995] ECHR 51. It cannot be that any one of the judges involved seriously thought that he would face stern opposition to an attempt to reform the law. Accordingly, it was cheaper for each of them to change it from the core. But the circumstances in *R v R* were very unusual, in that most laws which judges might desire to reform are not obviously repugnant to everyone. For example, Lord Denning’s programme of legal reform had to be conducted mostly in the penumbra of pre-existing principles. His attempt to reform offer-and-acceptance in *Gibson* (n 108) was met with outright refusal by the House of Lords. His campaign against the doctrine of precedent met the same fate: see *Broome v Cassell* [1972] UKHL 3. On the other hand, in *Central London Property Trust v High Trees House* [1947] KB 130, Denning J (as he then was) affirmed the doctrine of consideration but revived the then-obsolete doctrine of promissory estoppel to carve out an exception. The next century saw the gradual undermining of estoppel, so much so that, at the time of writing, there is a case before the Supreme Court which may well lead to its abolition: *Rock Advertising v MWB Business Exchange Centres* [2016] EWCA Civ 553. It is not possible to compare *R v R* to *High Trees* in a way that would allow me to say when it will be cheaper to proceed against the core and when judges will prefer to shift the penumbra of a law. But I think there is at the very least an intuition to the effect that most instances of legal change are closer to *High Trees* than to *R v R*.

¹¹¹ Note, however, that the extent of legal change that can be achieved in this fashion is limited. Firstly, penumbral issues only arise at the applicative stage, and if the strictly legal premises above that stage are sufficiently detailed, the adjudicative outcomes that the new rule changes will be few because of that rule’s specificity. For example, a judge who favours animal rights will achieve a lot if he changes the law of murder to include the killing of non-human beings. He will achieve less if he outlaws the killing of animals on Sundays in odd years. The instrumental use of defeasible propositions may therefore be expected to cause significant change only where the final norm is vague.

¹¹² Technically, if the first judge were to say that 40 km/h is illegal but 20 km/h would be legal, the 20 km/h speed limit would be *obiter*. *Obiter dicta* are considered highly persuasive but are not formally binding. But if the first

attempts at legal change will only be made when the judge's ideological preference is so strong that the expected benefit from its satisfaction outweighs the rhetorical cost of convincing other judges.¹¹³ Where the holding concerns a 'mixed' issue, the judge can secure that ideological benefit without incurring a rhetorical cost.

In the long run, this results in applicative uncertainty. Recall that there were three¹¹⁴ types of defeasible applicative statement – exclusionary, inclusionary, and gradational. I will now (briefly) argue that the repetitive litigation of penumbral cases results in a tendency for the judiciary to use gradational statements. Some type of applicative statement is required every time an issue arises that is in the penumbra of the law. If the first judge can formulate a simple, one-premise solution, he may well put it in inclusionary or exclusionary form. The second judge may also be able to do this. Their judgments would, however, be potentially binding on the third. So far as the resolution of the third controversy requires the application of a novel premise which points in an opposite direction to the first two, the third judge, will have no choice but to introduce a gradational test to account for the inconsistencies.¹¹⁵

3. Legal Change without Activism

I suspect the foregoing runs contrary to a game theoretical intuition. If all judges can ignore precedent gradational tests, then there is no reason to use gradational statements to change the law. The specifics run as follows: a gradational statement will introduce some novel, judge-subjective premise. If the next judge¹¹⁶ disagrees with the use of that premise, he will simply call it 'factual' and ignore it. The first judge, being forward-looking, will be aware of this possibility, and will formulate the rational expectation that the next

judge were to say that 40 km/h is illegal *because* it is higher than 20 km/h, then the 20 km/h would be the *ratio* of the case, and it would be binding.

¹¹³ Ponzetto & Fernandez (fn 101) say that this is efficient, as do Gennaioli & Schleifer (fn 109).

¹¹⁴ A correspondent statement is generally used to dispose of cases in the core. Its application to a penumbral issue can only be effective if other judges fail to detect the discrepancy. This is generally possible only if the evidentiary and ultimate facts have also been manipulated strategically. Their strategic manipulation is generally subject to very heavy evidence-law constraints, and taken to the extreme may expose the judge to severe sanctions. It may therefore be reasonably supposed that correspondent statements will be seldom used to instrumental ends.

¹¹⁵ I mean a sequence such as this: in Case 1, the judge introduces the premise 'all cars have wheels'. A case, Case 2, is promptly brought alleging that a bicycle is a car. It is held that 'all cars have engines'. Case 3 is brought where the claimant alleges that a ro-ro vessel is a car because it has an engine and a wheel. It is dismissed because 'the wheels of a car can be used for transportation'. Case 4 is brought in which a Vauxhall Vectra with a flat tire is argued not to be a car. If the judge wishes to dismiss it, it must be for some reason such as 'cars are said to have engines and useful wheels, but sometimes the wheels cannot be used for transportation and the object is still a car'. This is based on the unrealistic assumption that 'mixed' holdings are always considered binding. In fact, this only happens in some cases. However, the probability that a given holding will be deemed binding subsequently is undoubtedly positive. Provided a sufficiently high volume of litigation, the situation under the assumption used here will therefore arise. It is for this reason likely that the tests under a 'mixed' rule will be formulated in gradational terms.

¹¹⁶ I refer to two judges here for expositional convenience. In reality, it must be the case that the 'first' judge estimates the likelihood of acceptance in respect of the remainder of the judiciary in the aggregate, seeing as there are many ways in which his amendment may be reversed.

judge will only follow him if he believes they share the same preferences.¹¹⁷ But if this is so, it is possible for the first judge to change the core of the legal concept directly through a normative argument, safe in the knowledge that the second judge will accept it. The core being more general, the first judge will by so acting ensure that his preferences are stamped on a higher number of adjudicative outcomes than if he manipulates the penumbra. If this is correct, then the only rational conduit of legal change is through direct normative arguments for altering the core.

However, gradational, inclusionary, and exclusionary statements are potentially defeasible even when the judge who uses them has no desire to exploit that defeasibility. Defeasibility means that it is not possible in every instance to derive a categorical conclusion about the outcome of disputes from the given premises. Any judge is bound to find himself in a situation in which the externally-supplied premises are insufficient to determine whether the conditions given in the final law are met.¹¹⁸ The only solution is to introduce some novel unclassified premise.¹¹⁹ It is otherwise impossible to dispose of the adjudication.¹²⁰ The probability that this problem will manifest is positive in every instance of litigation. With time, it is inevitable that it will occur.

If this is correct, then neither ideological nor case-specific bias is necessary to establish that gradational statements will propagate themselves in the penumbræ of laws. The resultant uncertainty is unlikely to be lost on the judiciary. Precedent is always cited by counsel in the course of proceedings. A well-reasoned judgment will inevitably contain a lengthy summary of potentially applicable precedent judgments. To dispose of a novel case appropriately, the judge must give some good reason for disregarding some of those statements, or he must incorporate them into a novel defeasible statement. The latter option is, on the analysis here, less rhetorically demanding. But as the number of uncertain judgments rises, the 'amount' of normative justification needed to justify departure declines. The uncertainty cannot be eliminated through another applicative statement, since it too would be inherently malleable to subversion. A rational uncertainty-averse judge may thus be expected, at a certain level of uncertainty, to

¹¹⁷ There are some instances when it is impossible for one judge to know what another's preferences are. It is nonetheless possible to make an intelligent guess. To give a somewhat extreme example, suppose that a judge wants to change the law so that the courts can no longer review administrative decisions. It would surely be possible for the judge to discern that, in the intellectual climate of today, this new rule would be unlikely to command universal acceptance from his colleagues. And it is possible, by studying the judgments of courts, to form impressions of the judges' attitudes on much subtler points.

¹¹⁸ This situation corresponds, if I understand correctly, to that in Shleifer and Gennaioli's model (fn 109) in which a new informational dimension has to be incorporated into the law. The reason why my conclusions differ is that I assume, in line with Hart, defeasibility at the penumbra, whereby Shleifer and Gennaioli do not. That a rule is defeasible ultimately allows other judges to ignore it, which may explain the inapplicability of the Cardozo Theorem.

¹¹⁹ The novel premise can be 'neutral' or 'instrumentalist': see fn 102.

¹²⁰ Consider the example given at fn 115. In Case 4, the judge cannot refuse to account for the relevance of the flat tyre; even if he says that a flat tyre is the same as a perfectly good tyre, that is, that the case is indistinguishable, he is still evaluating the novel premise and attributing a weight to it. It just so happens that the weight is low.

instead change the final law. In this way, the core of the law changes because of uncertainty at the penumbra.

IV. Implications

There are some supplementary points which I believe are worth making here. Firstly, the last hypothesis might imply, in Judge Posner's language, that uncertainty is the only element of the judge's utility function.¹²¹ This is unrealistic. In choosing between candidate laws, the judge is likely to have regard to their fairness, efficiency, practicability, and many other desiderata. Without this qualification, it would be possible to say that on the reasoning advanced here, the courts can be expected to substitute the (mixed) requirement of intent in the law of murder with one based on strict liability. A fuller description of the process of legal change would have to account for this. I restrict myself to a very brief observation. Whether a judge will switch from an uncertain efficient law to a certain inefficient one depends on his assessment of the two laws' relative certainty and efficiency. If he believes more can be gained by way of certainty than lost by way of efficiency, the switch will take place.

Secondly, note that the entire process is driven by the vagueness of the original law. If a law has no penumbra but only a core, there would simply be no space for defeasible statements in judgments. But to produce a law with no penumbra, the lawmaker would have to list all the outcomes that he desires in litigation – he would have to acquire complete information about the conduct which he wishes to regulate. He would have to pay for an infinitely precise rule. Since this is usually uneconomical, he instead uses the bifurcation metalaw to allocate some issues to the discretion of the judge. He writes a standard. But since bifurcation is imperfect, it is unclear what is discretionary and what is not. Eventually, this causes the amortisation of the original law. The use of a standard, in conjunction with the bifurcation metalaw, results in that standard's amortisation.

Third, it may be thought my argument is that the system will shift from uncertain to certain laws with time. If a new law is to reduce the penumbral area, it must be more precise than the incumbent. And if the process recurs, the system equilibrates at a set of clear-cut laws. There is in fact no reason to suppose that the new law will be more precise than the incumbent. The uncertainty that the judge who implements the new law detects emerges from the multiplicity of applicative statements which relate to the existing definition. If the definition is changed, those applicative statements lose their precedential value, and the uncertainty that they generate disappears. It is irrelevant whether the new definition is more, less, or as vague as the previous. It is impossible, at least on the grounds given here, to make an accurate prognosis about the direction of legal change on the specificity spectrum. I have said that attempts to convert one standard into a rule will, under some conditions, simply cause a switch to another standard. The

¹²¹ Posner, R., 'What Do Judges and Justice Maximise? (The Same Thing Everyone Else Does)' 3 SCER 1.

second standard might be more or less rule-like than the first. Under these conditions, then, the common law exhibits no inbuilt tendency to more (or less) certainty over time.

Fourth, it must be said that the process identified here is not instant. The speed with which uncertainty in the system increases is dependent on the frequency of litigation of penumbral issues. This frequency may be very high, or very low: the process occurs so long as penumbral issues come to the courts with a positive probability.¹²² Even if penumbral issues are litigated very frequently, vertical stare decisis introduces a mechanism through which legal change is greatly delayed. The imposition of a new law in the first place is likely to be a controversial matter which will require the approval of the highest court of the land: if a first instance judge argues for some law that did not exist before, the matter is likely to be appealed; if the appellate court affirms the new law, it will usually grant leave to appeal to the Supreme Court. Once the Supreme Court affirms a law, only the Supreme Court may undo it. At the same time, potentially defeasible statements will multiply at the lower instances. The propagation of defeasible statements needs to be considerable before the Supreme Court agrees to revise the matter. By way of tenuous prognosis, it may be said that in cases where the frequency of litigation is low and *certiorari* very stringent, legal change will occur very slowly.¹²³ If, on the other hand, penumbral issues are litigated very often and the Supreme Court reviews many cases, the process will be much quicker.

V. Conclusion

I began by arguing that bifurcation is an imperfect classificatory tool. It is not always possible to distinguish between laws and facts, because law is just a special type of fact. Consequently, any system which bifurcates law and fact will have blind spots – some issue that arise in adjudication will fit into neither category. The problem is at its most pronounced when it comes to the application of laws to facts – the stage of application is in all likelihood neither legal nor factual.

I then moved on to describe the elements of a legal judgment, with a particular focus on application. Thereafter, I moved to elaborate on the core-penumbra concept. What emerged was that when describing the application of law to facts, judges have a choice between correspondent, inclusionary, exclusionary, and gradational statement. Correspondent statements indicate that the facts fall into the core of a law. The other three types of statement are deployed when the facts are penumbral.

With this in mind, I proceeded to legal change. By deploying the ‘mixed issue’ category, a judge in a common law system can change the law at a cost which is lower than it would be if he were to attempt to directly alter the core of a legal provision. The accumulation of penumbral cases, however, tends to increase applicative uncertainty. And we may expect the same thing to happen even if the judiciary is not instrumentally-minded. The

¹²² I have not subscribed here to any particular model which explains the selection of disputes for litigation. If one assumes that parties will only litigate if the outcome is uncertain, then penumbral issues will attract more litigation. Whether this is in fact true I do not know.

¹²³ It will be seen shortly that, in the example that I present, the process may take more than a century.

resultant increase in applicative uncertainty is unlikely to go unnoticed by the judiciary. Once it reaches a certain threshold, they are likely to change the originating law. Thus in the last analysis, the defects of bifurcation cause the law to change.

This has at least two important implications for the analysis of legal change under precedent. Firstly, the dominant view in the literature is that the accumulation of judgments converts standards into rules. On my argument, as judgments are issued under a standard, it is likely to grow more and more uncertain. Eventually, it is replaced by another standard, which is by no means guaranteed to be more rule-like. Secondly, another strand of the literature argues that there is an evolutionary tendency to efficiency in the common law. But if I am correct, then the common law simply oscillates between standards – as soon as one is adopted, it begins to amortise, and once it does, it is replaced with a new one. There is nothing to suggest that the new standard will be more efficient than the old. And even if it is optimal, it will grow more uncertain with litigation – so much so that it will ultimately be replaced by an inefficient, yet clearer, alternative.

Chapter VI

REMOTENESS IN CONTRACT – AN EXAMPLE

I have so far used a number of abstruse concepts to make a conjecture about the direction of legal change under precedent. In this section of the paper, I will give an example. I do not claim that a single example proves my theory – I merely wish to illustrate it. The example in question comes from the English law of remoteness in contract. I will begin by explaining what contractual remoteness is. I will then explain how its Victorian version differs from the modern one. Thereafter, I will discuss the case law which prompted the change. Finally, I will argue that the development of remoteness coheres with the theory I developed in the preceding chapters.

I. Remoteness

When two parties make a contract and one of them breaches it, the innocent party is normally entitled to monetary compensation equal to the loss suffered. This is commonly expressed as the idea that the court must put the claimant in the position he would have been in had the contract been performed.¹ To apply the law, the judge must compare the current state of the world to one in which performance took place as agreed. Once he identifies the differences, he must also determine whether those differences are attributable to non-performance or to some other cause. In the language of the law, unrelated consequences are said to be too remote to be recoverable. The law which determines which losses are remote and which are recoverable is called a remoteness law.

The best-known remoteness law originates from *Hadley v Baxendale*². I begin with the crucial passage from Baron Alderson's speech:

'Where two parties have made a contract which one of them has broken, the damages which the other party ought to receive in respect of such breach of contract should be such as may fairly and reasonably be considered either arising naturally, i.e., according to the usual course of things, from such breach of contract itself, or such as may reasonably be supposed to have been in the contemplation of both parties, at the time they made the contract, as the probable result of the breach of it. Now, if the special circumstances under which the contract was actually made were communicated by the plaintiffs to the defendants, and thus known to both parties, the damages resulting from the breach of such a contract, which they would reasonably

¹ *Robinson v Harman* (1848) 1 Ex Rep 850

² (1854) 9 ExCh 341

*contemplate, would be the amount of injury which would ordinarily follow from a breach of contract under these special circumstances so known and communicated.*³

It is analytically convenient to break the law down into two parts. Firstly, a contract breacher is responsible for those losses which are an obvious consequence of his breach. Secondly, where the losses suffered by the claimant are exceptional, the defendant is not liable unless notified of the claimant's special circumstances prior to entering in the contract.

I will now position the case within my theoretical framework. *Hadley v Baxendale* exists within a mixed system of justice which designates some matters as legal and others as factual. Being a law, it is what I called an external premise, and it is strictly deducible. It is an external premise because if a new claim were to be brought today under Baron Alderson's law, the trial judge would not be free to decide it in accordance with his own personal views. Its application, in other words, is non-discretionary. *Hadley v Baxendale* can also be positioned within an inferential tree. We might reasonably take 'breach of contract carries a sanction' as a major. Thereafter, sanction may be defined as 'money damages or, in exceptional cases, specific performance or an injunction'. 'Money damages' can be further defined as 'a sum of money such that it leaves the innocent party in the same position as he would have been in had the contract been performed'. 'Sum of money' can be further defined as 'equal to the damages that may be reasonably supposed to arise naturally, or equal to those which may be reasonably supposed to have been in the contemplation of both parties at the time they made the contract', which is the law in *Hadley v Baxendale*.

Adjudication under *Hadley v Baxendale* involves issues of fact and, accordingly, statements of evidentiary and ultimate fact. The strictly factual problems may be whether the claimant informed the defendant of a given business opportunity, whether this communication occurred before or at the time of making the contract, whether the defendant was in fact aware of the existence of the opportunity if it was not communicated to him, and so on and so forth. The corresponding evidentiary statements may take forms such as 'a letter was presented to me containing details of X', or 'the defendant testified that he spoke with the claimant on Y and information Z was exchanged', or 'in my experience, most businessmen know that N'. Ultimate facts, such as 'the defendant knew that the claimant was planning to resell', or 'the claimant found out about the opportunity after the contract had been made', can be derived from these evidentiary statements. And none of those statements would be binding on a future court.

I have so far described the legal side of *Hadley v Baxendale*, and also some potential factual matrices to which it might be applicable. *Hadley* also involves issues that are neither legal nor factual, that is, 'mixed' questions. Chief among those is whether the loss suffered by the claimant 'may be reasonably supposed to have arisen naturally' from the breach. Its answer determines which limb of the law applies. If the loss was 'natural', then the claimant can recover as of right; if it is not, then he has to show that he communicated

³ Ibid 355

with the defendant. The mixed issue further contains two elements, reasonableness and 'natural' loss. Both evade classification on the fact-law spectrum. It is not possible to provide a statement of facts which gives an unambiguous solution without using the word 'reasonable'. Nor is it possible, as a matter of law, to define exhaustively characteristics of the reasonable man.⁴ Whether something is reasonable is not an entirely discretionary matter. Nor is it, however, subject to strict rules of deductions in the way laws generally are.

What applicative statements may a judge use to dispose of a case under *Hadley v Baxendale*? These may be correspondent ('X would clearly reasonably expect that Y would want to resell the goods at such-and-such profit'), inclusionary ('that X is in the same market as Y means that he would have contemplated reasonably that Y would resell the goods at such-and-such profit'), exclusionary ('that X is a consumer means he would not have reasonably contemplated that Y was planning to resell the goods at such-and-such profit'), or gradational ('the circumstances on the whole, including X's properties profession, expertise, experience, and previous dealings, indicate to me that it would have been reasonable for X to contemplate that Y would want to resell the goods at such-and-such profit').

As before, I provide a diagrammatic representation of the foregoing for those readers who find graphics congenial:

⁴ This problem was noted in no lesser a contribution than Fuller, L. & Perdue, W., 'The Reliance Interest in Contract Damages' (1936) 46 Yale LJ 52, 83-7

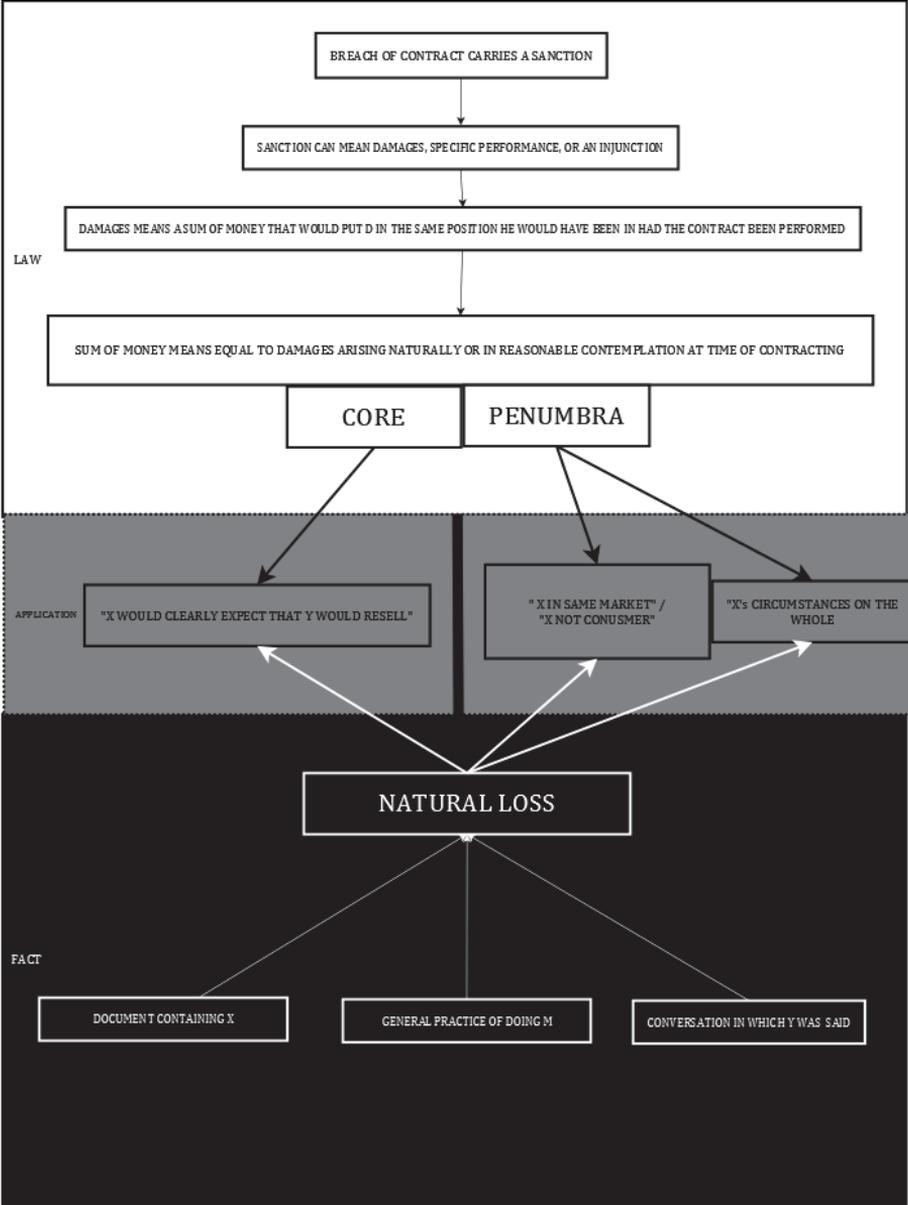


Figure 6: Legal, Factual, and Applicative Statements in the Law of Remoteness

Let me now give some examples of cases which fall within the core of *Hadley v Baxendale* and of some which fall in its penumbra. If X breaches a contract to deliver 100 widgets to Y, and both are widget merchants, then X must reasonably contemplate that Y will have

to procure the same amount of widgets from an alternative supplier. Likewise, if X has a contract to deliver 100 widgets to Y and Y has arranged, secretly and without telling X, to resell them to Z at ten times the market value, X cannot be expected to have had this in contemplation. These examples are so trivial that it is unsurprising to see that they are seldom litigated, or if they are the judgments are rarely reported. Penumbral controversies, on the other hand, abound in the law reports. For example, the contract may be one where X has to deliver some equipment and install it, he installs it poorly, Y sees the defect but misassesses the risk it poses, the risk materialises and X sues.⁵ Or it may be that X contracts to give some information to Y, he gives him erroneous information and as a result Y retains an asset he would have otherwise sold; thereafter, the market crashes for reasons unrelated to X and Y's asset becomes worthless.⁶

II. The Judgment in *The Achilleas*

What I want to show in this chapter is that, within that penumbra, a large number of gradational statements accrued. That accrual resulted in the amortisation and ultimate abrogation of *Hadley v Baxendale*. To that end, I must describe the history of the law between *Hadley v Baxendale* and *The Achilleas*⁷. Before I do so, however, I must show that *Hadley v Baxendale* is no longer a peremptory proposition of law. The point is not free of controversy, which is why I will pestle it at some length.

The owners of *The Achilleas* had chartered her to the defendants for a period of some months. They had also contracted with a third party for the subsequent fixture of the vessel. The defendants were late in delivering her. During the delay, market rates fell. The owners claimed for the difference between the price they would have obtained from the other party had redelivery been timely and the price which they obtained at the date when it took place.

The legal problem can be summarised thus: it is perfectly foreseeable that the owners of an asset such as a ship are likely to seek its permanent deployment. On the other hand, it is commonly understood in the shipping industry that charterers do not bear the risk of hire rate fluctuations in respect of future charters. That understanding is so common that, as Lord Hoffman and Baroness Hale observed, no such claim had been made in centuries of admiralty litigation.⁸

The defendants ultimately succeeded, but their Lordships were divided on the reason. Lord Hoffman gave the leading speech. He was of the view that the damages regime must be based on implied agreement. He cited *The Pegase*⁹ with approval, and he took a favourable view of the holding in *Mulvenna v Royal Bank of Scotland*¹⁰ to the effect that 'the concept of reasonable foreseeability is not a complete guide to the circumstances in

⁵ *Parsons (Livestock) v Uttley Ingham & Co Ltd* [1978] QB 791

⁶ *South Australia Management Corporation v York Montague* [1996] UKHL 10

⁷ *Transfield Shipping v Mercator Shipping (The Achilleas)* [2008] UKHL 48

⁸ *The Achilleas* (n 7) at [10]

⁹ [1981] Lloyd's Rep 175

¹⁰ [2003] EWCA Civ 1112

which damages are recoverable as a matter of law'¹¹. Lord Hope took a similar approach. But he also gave lip service to the principle of foreseeability, which he thought in the instant case could be tempered with 'the public policy of the law'. The crucial policy consideration, in his view, was that the law ought to give effect to the implicit intentions of the parties. Lord Rodger thought that the application of a pure foresight analysis to the case yielded the same outcome on the facts. He nonetheless agreed with Lord Hoffman.¹² Baroness Hale was sceptical. She said that the implied agreement theory may very well be just in the particular circumstances of the case, but that it would pose difficulties in the future. For these reasons, she agreed with Lord Rodger but not with Lord Hoffman.¹³ Lord Walker agreed with everyone.¹⁴

It would therefore appear that the implied agreement theory of remoteness commanded the support of the majority. Four out of five Law Lords were in agreement with Lord Hoffman, who was its main exponent. English law at present appears to stand thus: the promisor will be liable for losses which, had he contemplated the matter at the time of making the contract, would be 'not unlikely' to result from breach, and which he tacitly understands to have assumed under the contract.

The foregoing is based on a mechanical count of the pronouncements in the House of Lords judgment. Absent another case at the highest level, it is impossible to tell with certainty whether it is correct.¹⁵ There have been some reported cases which may be thought to support it. In *The Sylvia*¹⁶, it was held that the position for now is as follows: there is a presumption that, in an ordinary case, *Hadley v Baxendale* will apply. This presumption can be rebutted if it can be shown that there was an implied agreement between the parties to the effect that the risk of some foreseeable contingency would not be borne by the breaching party. The underlying rationale is that, in most cases, the parties' tacit understanding will correspond to the *Hadley* allocation of risk.¹⁷ If this is so, then it must be true that *The Achilleas* changed *Hadley*. Otherwise there would be no reason to examine the overlap between tacit understanding and reasonable contemplation.

¹¹ *Ibid* at [33]

¹² *The Achilleas* (n 7) at [63]

¹³ *Ibid* at [93]

¹⁴ *Ibid* at [87]

¹⁵ Views that are similar to the ones expressed here were expressed in *Sylvia Shipping v Progress Bulk Carriers* [2010] EWHC 542 (Comm) at para 36 and 39, as well as in Beale et al (eds), *Chitty on Contracts* (32nd edn S&M) at 26-110G. The contrary view is taken in McGregor, H., *McGregor on Damages* (19th edn, S&M) para 6-173. McGregor's view, which is cited in *The Sylvia* at para 37, is that Lord Hoffman and Lord Hope on their own could not change the law even if Lord Walker agreed with them because Lord Walker expressed inconsistent *obiter* views in a Privy Council case later on. McGregor believes that it is 'clear' that this is the case. This is controversial given that Privy Council judgments are not binding, that it is not customary to consider a judge's career in determining the meaning of his words in a particular case, and given that *The Achilleas* is a House of Lords case and *Hadley v Baxendale* is not.

¹⁶ *Ibid* at [36]

¹⁷ *Ibid* at [41]

The contrary view appears to have been taken by Flaux J in *The Amer Energy*¹⁸. Yet his remarks were *obiter*. The true bone of contention in that case appears to have been whether *The Achilleas* means that *Hadley v Baxendale* can never apply in a non-shipping case. Flaux J disagreed.¹⁹ This is not inconsistent with *The Sylvia*. And even if *The Amer Energy* is taken to say that *The Achilleas* is the same as *Hadley v Baxendale*, it was a High Court judgment. After it was decided, the Court of Appeal in *Supershield v Siemens Buidling Technologies*²⁰ also examined the issue. Its holding was that *Hadley v Baxendale* is controlling precedent only when it ‘reflect[s] the expectation or intention reasonably to be imputed to the parties’.²¹ That holding was also, strictly speaking, *obiter*; but if there is a clash between the *obiter* in *The Amer Energy* and the *obiter* in *Supershield*, the latter must prevail. In *The Sabrina I*²², the only subsequent case which I could find, *The Sylvia* was applied to the dot:²³ Teare J first determined what the ‘natural’ loss was²⁴ and then moved to consider whether there could have been any reasonable expectation that it had not been assumed.²⁵ The current position seems to be that *Hadley v Baxendale* applies unless there was some tacit understanding that a foreseeable loss would be borne by the innocent party.²⁶ This is not the same as *Hadley v Baxendale*: Baron Alderson’s statement used to be a plenary proposition of law. It is now a rebuttable presumption.²⁷

III. From *Hadley v Baxendale* to *The Achilleas*

For these reasons, what follows is based on the assumption that *The Achilleas* changed the law of remoteness. Now, the starting point of the brief historiographical sketch that I develop is *Hadley v Baxendale* itself. The facts of that case, at least as stated by Baron

¹⁸ *ASM Shipping of India v TTMI of England* [2009] 1 Lloyd’s Rep 293. The judge stated that he did not believe that the majority ‘were intending to lay down some completely new test... different from the so-called rule in *Hadley v Baxendale*’ (at [17] per Flaux J)

¹⁹ *Ibid* at [18]

²⁰ [2010] EWCA Civ 7

²¹ *Ibid* 43. It must be conceded that the Court of Appeal holding is, strictly speaking, as *obiter* as the one in *The Amer Energy*. The issue at dispute was whether the defendant, Siemens, had acted reasonably in settling a case with a third company, the well-known London firm of solicitors Slaughter & May. This in turn depended on whether *The Achilleas* introduced a change in the law that would have improved Siemens’ chances had the matter come to be litigated.

²² *Ispat Industries v Western Bulk PTEL* [2011] EWHC 93 (Comm)

²³ *Ibid* [49]-[53]

²⁴ *Ibid* [53]. I refer in particular to the words ‘damages measured by the hire that would have been paid for the expected minimum duration of the time charter trip’.

²⁵ *Ibid* ‘There is in my judgment no basis on which it could be said that such measure was contrary to the market understanding or expectations... There is therefore no reason to suppose that this was one of those relatively unusual cases where the question of assumption of responsibility had to be specifically considered’

²⁶ This is a narrow interpretation of the test. It can be expanded to include the proposition that an unforeseeable loss may be borne by the breacher if there was an implied understanding that he would bear it. But it is difficult to conceive of a situation in which a breacher tacitly agrees to bear a risk which he cannot reasonably be expected to have known about.

²⁷ Another case in which this is strongly suggested is *SC Confectia v Miss Mania Wholesale* [2014] EWCA Civ 1484. That case is not binding precedent since it strictly concerns the interpretation of Romanian law. The specificities of English conflict of laws rules meant that *The Achilleas* was applicable to a provision in the Romanian Civil Code which mirrored *Hadley v Baxendale*. This notwithstanding, Beatson LJ was of the view that *Hadley* is now a presumption at [25].

Alderson,²⁸ fell in the core of the new law. Baron Alderson was at pains to point out that the defendant could not have known of the 'special circumstances' of the defendant, and that his losses accrued from a circumstance of which the claimant could not have had any notice. In the absence of such knowledge, the application of the law depends on the probability with which the events that did transpire would normally occur. In the framework of the preceding chapter, the key passage of Baron Alderson's speech contains a final law.²⁹ The ultimate fact in the judgment is that 'in the great multitude of cases of millers sending off broken shafts to third persons by a carrier under ordinary circumstances, such consequences would not, in all probability, have occurred'. This state of reality exhibits an essential correspondence with that stipulated in the final law, and the application of law to fact boiled down to registering the correspondence 'It follows therefore, that the loss of profits here [is unrecoverable]³⁰'. Likewise, in the next case in which *Hadley* was applied, the correspondence between the law and the facts appears to have been sufficient to reduce the dispositive part to a two-line statement.³¹

In *Horne v Midland Railway Company*³², the claimants were a day late in delivering a large shipment of shoes. The defendants had informed the claimants that the shoes were needed by the 3rd February. Delivery took place on the 4th. The claimants had a contract to redeliver the shoes to the French army during the Franco-Prussian War. By 1st February, the French had been routed. They no longer needed shoes. The delay caused the defendants to lose out on the army contract. They sold the shoes on the open market at a large loss. The case is a clear example of an issue which is outside the core of the remoteness law: there was nothing 'natural' about the claimants' arrangement with the French army. Predictably, they lost.

What of cases at the penumbra? I said earlier that the first few of those can be disposed of by means of relatively simple exclusionary and inclusionary statements. In *Smeed v Foord*³³, it was held that a reasonable person can contemplate weather changes but not market fluctuations.³⁴ That any such statement is defeasible, that is, that no head of damage can be considered a pure matter of law, was confirmed in *Gee v The Lancashire and Yorkshire Railway Company*,³⁵ and then again in *Wilson v Lancashire and Yorkshire*

²⁸ On the actual facts of *Hadley*, see Faust, F., 'Hadley v Baxendale - an Understandable Miscarriage of Justice' (1994) 15 JLH 41

²⁹ Whether Baron Alderson did in fact deduce it from a pre-existing source of law is a different matter. It is virtually clear that he did not, see e.g. Danzig, R., '*Hadley v Baxendale*: a Study in the Industrialisation of the Law' (1975) 4 JLS 249. The ruling itself, of course, represents the major 'innovation' in the case. But since it was preceded by a jury system, it is not possible to discuss it in the framework that I outlined here which concerns bench trial. I discuss jury trial in Chapter IX.

³⁰ I have omitted here the remainder of the judgment, which repeats the law (n 3).

³¹ *Great Western Railway Company v Redmayne* (1865-6) LR 1 CP 329 ('the market value of the goods was their value in the market independently of any circumstances peculiar to the plaintiff, and that the profits that would have been made by the sale of the goods at Cardiff through the plaintiff's traveller being present could not be recovered.' (at 330))

³² (1873) LR 8 CP 131

³³ (1859) 120 ER 1035

³⁴ *Great Western* (n 31) 615-6

³⁵ (1860) 158 ER 87. The judge had instructed the jury to consider wages paid as an element of loss. He was reversed on this point, because it was not possible to deduce such a thing from the law. The relevant passage from the speech is: 'if the judge had said, as a proposition of fact, 'I think that you will consider that the plaintiffs

Railway Company.³⁶ By the time the better-known *Nettleship*³⁷ was decided, judges were using multi-factor, gradational tests. In applying *Hadley* to the facts there, Willes J said that 'several circumstances occur to one's mind in this case to shew that there was no such knowledge on the defendant's part which would warrant the conclusion contended by the plaintiffs'.³⁸ These circumstances included the specificity of the part that had to be delivered, and the defendant's lack of knowledge of the market for that part.³⁹ In the particular instance, the two pointed at the same conclusion. The first defeasibility issue, at least in the reported cases, arose in *The Parana*⁴⁰. It had previously been held that market fluctuations were not foreseeable.⁴¹ This appears to have been a controversial point. Melish LJ referred to several authorities that had been cited to him for and against the proposition.⁴² The court drew a distinction between ordinary carriage and carriage by long sea voyage⁴³. In the former case, market fluctuations could be foreseen. In the latter, they could not.⁴⁴ The rationale was that long carriage by sea is uncertain. It is impossible for the promisor to contemplate the state of the market around the promised time of arrival.

One of my main theoretical arguments was that if a holding concerns a 'mixed' issue, then its precedential value is questionable. We do not know if the statement in question concerns the law, when it would be binding, or the facts, when it would not. This is what appears to have happened to *The Parana* too. In *Dunn v Bucknall Brothers*⁴⁵, it was held that *The Parana* could not establish a peremptory proposition of law.⁴⁶ Length and uncertainty were merely factors to be considered in the gradational exercise of measuring reasonable contemplateability. Other factors, which Collins MR did not

arc entitled to claim for wages,' I doubt if there would have been any objection to the summing up. But he says, 'Where, under circumstances such as exist in the present case, by the neglect of a carrier a manufacturer has no material to carry on his business, he has a right in my opinion to charge as legal damage such loss as naturally and immediately arose from the stoppage of his mill.' He should have added, 'If the jury are of opinion that the stoppage was the natural consequence of the non-delivery of the goods.' I say this in order that the County Court judge may not suppose on the next trial that we think that these two sums are not recoverable; for I do not say so; and I do not understand that the other members of the Court think so.' (per Bramwell B at 90)

³⁶ (1861) 142 ER 248, 254 per Keating J.

³⁷ *British Columbia and Vancouver Island Spar, Lumber, and Saw-mill Company v Nettleship* (1867-8) LR 3 CP 499. The case is well-known for advancing the proposition that if the promisee wants to be covered for a 'special loss' under the second limb of *Hadley*, she must communicate the possibility of that loss very explicitly. (per Wilkes J at 509). I do not discuss this part of the holding at great length because it was reversed in *Czarnikow v Koufos* ('*The Heron II*') (1969) 1 AC 350.

³⁸ *Nettleship* (n 37) 509

³⁹ *Ibid*

⁴⁰ (1877) 2 PD 118

⁴¹ *Smeed* n 33

⁴² *The Parana* (n 40) 121

⁴³ *Ibid* 123-4

⁴⁴ This finding was reversed in *The Heron II*.

⁴⁵ [1902] 2 KB 614

⁴⁶ *Ibid* 622

specify⁴⁷, could also be taken into consideration. Everything depended on 'the circumstances of the case'⁴⁸.

The remoteness law first came before the House of Lords in *R&H Hall v WH Pim Junior & Co.*⁴⁹ As we have seen, by that time a multi-factor test was already in use. The Lords formulated it as a question of probability. This was the approach of Viscount Dunedin who believed that for an event to be probable, 'an even chance' was enough. He did not specify what an even chance meant, instead restricting himself to a vague upper bound: that an event is probable does not mean that 'the chances are all in favour of the event happening'.⁵⁰ These verbal expressions of probability are, of course, highly gradational. In litigation, probabilistic questions usually involve both risk in the statistical sense and what economists call uncertainty or ambiguity.⁵¹ Diverse factors are taken into account when determining probability. The weight which the judge attributes to each one of those factors need not, and often cannot, be stated. Where the factors are listed, moreover, this does not mean that in the next case they will be the same or that they will be weighed in the same manner. If 'even chance' is sufficient in one case, it does not have to be so in another. And the definition given in the second case will be as good a statement of 'mixed fact and law' as the first.

This is in evidence in the next two cases, *Monarch Steamship*⁵² and *Victoria Laundry*.⁵³ In *Monarch Steamship*, the factors that were taken into consideration included, but were not limited to, the likelihood of unseaworthiness, its consequences as contemplated by the reasonable man, and the foresight necessary to predict the outbreak of World War II in April 1939.⁵⁴ Taken together, these meant that a reasonable man would have considered the likelihood of the defendant suffering the loss he did 'at least a serious possibility'⁵⁵ and 'a real danger to be taken into account'.⁵⁶ These two measures of probability were sufficient, but not necessary conditions, to found liability.⁵⁷ In *Victoria Laundry, Hadley v Baxendale* had to be applied in a non-shipping context. The factors that were included in

⁴⁷ This was perhaps due to the fact that he was a member of the appellate court reviewing a trial finding: 'On the admitted facts it seems to us at most a case of *res ipsa loquitur* as to the inferences which both parties must have drawn as to the purpose of the shipment and the probable effect of delay in delivery, and, as is well known to practitioners in the Commercial Court, cases are there conducted on the basis of mutual admissions which do not always appear in the formal record.' (Ibid 623-4)

⁴⁸ Ibid 623

⁴⁹ [1928] All ER 763

⁵⁰ Ibid

⁵¹ *Davies v Taylor* [1974] AC 207

⁵² *Monarch Steamship v Karlshamns Oljefabriker* [1949] AC 196

⁵³ *Victoria Laundry (Windsor) v Newman Industries* [1949] 2 KB 528

⁵⁴ *Monarch Steamship* (n 52) 233

⁵⁵ Ibid

⁵⁶ Ibid 234

⁵⁷ Lord Du Parcq said that 'Circumstances are so infinitely various that, however carefully general rules are framed, they must be construed with some liberality and not too rigidly applied. It was necessary to lay down principles lest juries should be persuaded to do injustice by imposing an undue, or perhaps an inadequate, liability on a defendant. The court must be careful, however, to see that the principles laid down are never so narrowly interpreted as to prevent a jury, or judge of fact, from doing justice between the parties. So to use them would be to misuse them.' (at 201) The pronouncements to the same effect in *Gee* (n 35) were also cited with approval. (at p 232)

the assessment included the expertise of reasonable engineering companies⁵⁸, the likely uses of a large boiler⁵⁹, and the price that had been paid under the contract.⁶⁰ These were thought 'liable to result' in loss of the kind that the defendant suffered. And this was again sufficient to ground liability under the first limb of *Hadley*.⁶¹ Between two cases, the criteria that are used to determine what a reasonable person would contemplate are entirely different. The weight that is accorded to each is in never fixed. And the resultant outcomes can be taken as either legal definitions or factual propositions at the same time.

Since none of those criteria could be made binding, so far as they related in part to the facts of the specific cases and in part to the 'legal' statement in *Hadley*, they coexisted in the law. The case in which the resultant uncertainty was acknowledged is *The Heron II*.⁶² Before I turn to it, however, it may be desirable to show succinctly how indeterminacy had mushroomed by that the time it came to be decided. As of 1967, the following tests could be used to determine whether an event was sufficiently probable to be considered natural: 'even chance'⁶³, 'not unlikely'⁶⁴, 'likely'⁶⁵, 'more likely than not'⁶⁶, 'might well'⁶⁷, 'liable to result'⁶⁸, 'serious possibility'⁶⁹, 'on the cards'⁷⁰, 'real danger'⁷¹, 'reasonably certain'⁷², 'to be taken into account'⁷³, 'in the great multitude of cases'⁷⁴, 'probable'⁷⁵, 'within common contemplation'⁷⁶, 'natural and obvious'⁷⁷, 'a substantial degree of probability'⁷⁸, 'reasonably expected'⁷⁹, 'odds of 3 to 1 against'⁸⁰, 'not a possibility of

⁵⁸ *Victoria Laundry* (n 53) 540

⁵⁹ *Ibid* 541

⁶⁰ *Ibid* 542

⁶¹ *Ibid* 539-40. This was not the only definition used in the case, but it was the most common. I only refer to it here for ease of exposition, and I will shortly return to the multiplicity of criteria that had emerged by the time *The Heron II* came to be decided.

⁶² N 37

⁶³ *Hall* (n 49)

⁶⁴ *Hall* per Lord Shaw. This was certainly the best-known view of Lord Reid in *The Heron II* (at 381) and of Lord Morris (at 397).

⁶⁵ *The Heron II* (n 37) per Lord Morris at 397

⁶⁶ *Ibid* per Lord Hodson at 410

⁶⁷ *Hall* (n 49) per Lord Phillimore at 337

⁶⁸ *Victoria Laundry* (n 53) per Lord Asquith at 539; *The Heron II* (n 37) per Lord Morris (at 396) and Lord Pearce (at 415).

⁶⁹ *Monarch Steamship* (n 52) per Lord Du Parcq at 233; *The Heron II* (n 37) per Lord Morris (at 400), Lord Pearce (at 415), and Lord Upjohn (at 424).

⁷⁰ *Victoria Laundry* (n 53) per Lord Asquith at 540. It must be noted that this definition was rejected by everyone in *The Heron II*.

⁷¹ *Monarch Steamship* (n 52) per Lord Du Parcq at 232; *Victoria Laundry* (n 53) per Lord Asquith at 540. This was rejected explicitly by Lord Reid but approved by Lord Morris, Lord Pearce, and Lord Upjohn in *The Heron II* (n 37).

⁷² *The Parana* (n 40) per Mellish LJ at 123. Lord Reid rejected this in *The Heron II* (n 37).

⁷³ *Monarch Steamship* (n 52) per Lord Uthwatt at 232, *The Heron II* (n 37) per Lord Morris (at 424)

⁷⁴ *Hadley* (n 2) per Alderson B at 357 and *The Heron II* per Lord Hodson (at 384)

⁷⁵ *Hadley* per Alderson B at 355

⁷⁶ *Victoria Laundry* (n 53) per Lord Asquith at 538.

⁷⁷ *The Heron II* (n 37) per Lord Pearce at 416-7

⁷⁸ *Ibid* per Lord Reid at 388

⁷⁹ *Victoria Laundry* (n 53) per Lord Asquith at 543

⁸⁰ *The Heron II* (n 37) per Lord Reid at 390

academic interest'⁸¹, 'considerably less than an even chance but nevertheless not very unusual and easily foreseeable'⁸², 'arising in the usual course of things'⁸³, 'reasonably foreseeable'⁸⁴, 'natural consequence'⁸⁵, and 'not a necessary result'⁸⁶. What degree of probability is denoted by each phrase is anyone's guess.⁸⁷

The Heron II has been interpreted as a solution to that uncertainty – from then on, for a loss to be considered natural, it would have to be 'not unlikely'. The phrase originates from Lord Reid's speech. Quite why this phrase became so authoritative is unclear - Lord Reid himself used several other expressions to denote the requisite degree of probability. So did the rest of their Lordships.⁸⁸ But it is true that the courts' subsequent applicative statements almost always refer to 'not unlikely' as the law. Did this solve the problem? I think not. Firstly, 'not unlikely' as a phrase does not denote any particular degree of probability. It does not force the judge to make an ultimate statement of fact that contains a precise expression of the probability with which the consequence would have been reasonably contemplated. It is still enough to draw up a list of factors, weigh them somehow, and declare that they point to one outcome or another. The switch from multiple definitions to one does little to make the law more predictable. Secondly, the assessment of probability is in itself based on factors and weightings that, being 'mixed', are defeasible. A uniform test does not yield uniform outcomes. It merely gives them an outward impression of uniformity. The clarification in *The Heron II* reworded the *Hadley* law, but it did not make it clearer. The switch was from one vague standard to another.

The Heron II postponed the eventual demise of *Hadley*. But it did not prevent it. The process began with *The Pegase*.⁸⁹ Goff LJ, as he then was, pointed out that whenever a claimant had sought to recover for lost profits under *Hadley v Baxendale*, he would lose.

⁸¹ *Monarch Steamship* (n 52) per Lord Uthwatt at 232

⁸² *The Heron II* (n 37) per Lord Reid at 382

⁸³ *Hadley* (n 2) per Alderson B at 354

⁸⁴ *Victoria Laundry* (n 53) per Lord Asquith at 539

⁸⁵ *Cory v Thames Ironworks Company* (1867) LR 3 QB 181, 190 per Blackburn J

⁸⁶ *Victoria Laundry* (n 53) per Lord Asquith at 540

⁸⁷ *Home Dairies v Skilton* [1970] 1 WLR 526, 536 per Harman LJ

⁸⁸ This seems to have become standard practice almost immediately after the judgment was handed down. Lord Reid himself used the expression consistently in an unrelated House of Lords case from the same year: *Henry Kendall & Sons v William Lillico & Sons* [1968] 3 WLR 110. He did not explain why he preferred it over the others in that case, nor was he obliged to. The reason, bizarrely, may be that the headnote to *The Heron II* mentioned 'not unlikely' twice. In *Vacwell Engineering v BDH Chemicals* [1969] 1 QB 88, the headnote was cited as a convenient summary (at 107). The House of Lords again broached the subject in *Ashington Piggeries v Christopher Hill* [1972] AC 441, it was said that whether the test is 'likely', 'not unlikely', or 'liable to' is a 'matter of linguistic preference' (at 477), but 'not unlikely' had been used by the Court of Appeal and their Lordship seem to have opted for it to maintain linguistic consistency. (at 487) By 1978, it appears that 'not unlikely' had become the norm. In *Parsons v Uttley Ingham* [1978] QB 791, the various definitions were cited (ibid 801), and then 'not unlikely' was used at the applicative stage by Lord Scarman (at 811) cf Lord Denning at 802. This included what appears to be a slight on the trial judge for using 'sufficiently likely' in his judgment. No reason was given for the preference of one House of Lords definition over another, and the case became well-known for reasons that are quite unrelated from the probability threshold. Thereafter, most of the reported cases use the phrase to the exclusion of the others.

⁸⁹ *Satef-Huttenes Albertus v Paloma Tercera Shipping ('The Pegase')* [1981] Lloyd's Rep 175. The case is well-known for another proposition, namely that there is just one limb to *Hadley v Baxendale* in which the defendant is simply assumed to foresee what he knows. I do not think speaking of one limb or two changes the rule too much, which is why I do not discuss this part of the finding in detail here.

In *The Pegase*, it was clear on the facts that the loss of profits that the claimant had suffered was 'not unlikely' to result from breach. Goff LJ found that the proposition that loss from market movements was irrecoverable was not indefeasible, being just one of many factors: it was simply the case that in a competitive market recovery would be precluded by the rules on mitigation. The post-*Heron II* law began to accumulate gradational statements.

In *Parsons*, the defendant had installed equipment in the claimants' pigsty but had forgotten to open its ventilator. As a result, the nuts that were fed to the pigs became mouldy. Mouldy nuts do not normally affect pigs. In that instance, however, some of the pigs caught E.coli. It spread rapidly and killed a great many, causing the defendant a loss of £30,000. The question before the court was whether this loss was 'not unlikely' to result from the defective installation. Orr LJ and Scarman LJ followed an approach similar to that of Goff LJ. Remoteness, they said, is ultimately a question of fact. Although the outbreak of E.coli was unlikely, injury to the pigs generally was. The defendant was liable. Lord Denning highlighted the uncertainty of the vague criterion⁹⁰. He instead proposed a law whereby a person would be liable for all physical damage caused to another irrespective of its foreseeability. This was a clear, normative statement in favour of altering *Hadley*. The argument for legal change ultimately failed because the other two judges were not persuaded by it. But the case shows that there was growing concern about the uncertainty produced by *The Heron II*.

In the *SAAMCO*⁹¹ case, the defendants' negligent valuations had induced banks to procure certain properties. The market then crashed and the banks sued the valuers. The House of Lords refused to award the full difference in price to the banks. A crash in the property market appears to be a 'not unlikely' situation. If this is correct, then the banks had a good argument for recovery. Lord Hoffman, who delivered the only speech, made no reference to *The Heron II*. He instead founded the judgment on assumption of responsibility grounds, a tort law doctrine. The effect of the judgment was to deny recoverability in a case in which the loss was 'not unlikely'⁹²

I will now turn to *The Achilles* itself, in which the court confronted the problem directly. The defeasibility of any application of *Hadley* is a theme that runs throughout the judgment. And change was affected through the fact-law distinction: foreseeability, Lord Hoffman claimed, was a question of fact. But contractual interpretation is a matter of law. Since the implied agreement test turns on interpretation, it is hierarchically superior to the question of remoteness. In his Lordship's opinion, the former is in the law subsumed by the latter: the application of a foreseeability test, such as *Hadley*, is only triggered by a finding that the construction of the contract requires it.⁹³ Lord Hope appears to indicate that this had always been the position, and that Baron Alderson was referring to the

⁹⁰ After citing the authorities, his Lordship stated: 'I cannot swim in this sea of semantic exercises... I am swept under by the conflicting currents' (at 802)

⁹¹ *South Australia Asset Management v York Montague* [1997] AC 191

⁹² This was merely registered by Lord Hoffman himself in *The Achilles*: 'The effect of the *South Australia* case was to exclude from liability damages attributable to a fall in the property market notwithstanding that these losses were foreseeable in the sense of being 'not unlikely' (at [17])

⁹³ *The Achilles* (n 7) at [24] and [25]

special, but common case, in which the implied agreement is that only foreseeable losses will be covered.⁹⁴ Lord Rodger, who as will be recalled claimed to be applying *Hadley v Baxendale*, simply pointed out that the volatility of market conditions is yet another factor that could be included in the assessment of probability under the orthodox approach. He accordingly concluded that if all circumstances are taken into account, and weighed in some unknown manner, the loss in the case was improbable.⁹⁵ Lord Walker too was of the view that in *The Heron II*, the law turned not only on probability but also on conditions in the parties' trade.⁹⁶ And Baroness Hale, who did not make it clear if she wanted to have the appeal allowed or not, believed that the uncertainty generated by the new test would be higher than that under the old.⁹⁷

The majority assumed that the defeasibility, that is, the factuality of *Hadley v Baxendale* meant that it was *always* subject to the strictly legal test of implication. This type of reasoning would surely be unavailable in the case of a 'pure' legal premise: one would not expect, for instance, to see the abolition of core doctrines such as offer, acceptance, and consideration in the form of a 'discovery' that contract in general means something else. Some form of normative justification would be advanced instead. The flexibility, that is the ambiguity, of the *Hadley* test was in the end seen as a reason to not treat it as a test at all. Secondly, whenever the normative implications of the judgment were mentioned, the dispute always turned on certainty. There appears to have been an implicit assumption that if the new law was not simply a restatement of the old, then it was more desirable because the old was uncertain.⁹⁸

⁹⁴ At [36]. There is in fact some support for this view in Holmes, O., *The Common Law* (Gutenberg 1881) at 302-3 and in *Globe Refining v Landa Cotton Oil* (1903) 190 US 540. But it is certainly not what *Hadley* is generally taken to mean today.

⁹⁵ At [60]

⁹⁶ At [78]

⁹⁷ At [93]

⁹⁸ This was very obvious in the Court of Appeal judgment. There, Rix J said that 'The rule [in *Hadley*] is not all that easy to understand in the abstract, free of all practical application' (at [87]), that 'Such problems of line-drawing are often inevitable in the law' (at [112]) and 'There is no fixed rule, and certainly no binding authority, that damages for late delivery are limited to the overrun period measure. There is of course nothing wrong with a rule which provides for such a measure. It would be outrageous if the law did not provide for such a measure. However, even [counsel for the appellant] accepts that it is only a prima facie measure, and that damages for loss of fixture may be acceptable on proper facts... The development [of the jurisprudence] would be entirely in accordance with principle. Its refusal to develop would not be in accordance with principle. This, therefore, is not a case where the argument in favour of certainty, or the *Nukila* principle, militates against the claim.' (at [118]). The House of Lords, in overruling Rix J, must have implicitly assumed that the last sentence in particular was incorrect. The proposition that this did in fact happen in *The Achilleas* seems to have been confirmed by Lord Hoffman, who writing extra-judicially stated: 'The orthodox approach produces a high degree of indeterminacy because it relies on only two concepts: kind of loss and degree of probability. But the cases show that these are open to very considerable manipulation to achieve what the court considers to be a fair result. You can, as in *Jackson's* case, create liability for unforeseeable losses by saying that it is the same kind of loss as would have been, to some extent at least, foreseeable. Or you can deny liability by saying that it really was unforeseeable, or a different kind of loss. Lord Rodger was able to arrive at what we all thought to be the correct result with the aid of only the single concept of probability.' (Lord Hoffman, '*The Achilleas*: Custom and Practice or Foreseeability' (2010) 14 *Edinburgh LR* 47, 52-3)

IV. Implications

I have so far commented on some specific features of individual cases. I should like to also try to identify some general tendencies which I believe are relevant to the theoretical propositions that I advanced earlier. First, I posited that there is a choice for each activist judge between changing the core of a law and shifting its penumbra. I further suggested that these two options differ in 'rhetorical cost'. Now, there are very good reasons why a judge may be unwilling to identify himself openly as activist. My conjecture is unverifiable. But it may nonetheless be interesting to note that, in the twenty-odd cases that I adverted to, only three judges made an attempt to explicitly modify *Hadley v Baxendale*. The first was the notoriously activist Lord Denning in *Parsons* and the latter two were Lord Hoffman and Lord Hope in *The Achilles*.⁹⁹ At the same time, *Hadley* was being used to reach all kinds of inconsistent outcomes. At no point did any judge try to alter the core of the law. It is entirely conceivable that the hundred-or-so judges involved in those proceedings were without exception neutral, and that there was simply dissensus over the correct application of the principle. But if some proportion of those judges were activist, it is clear that they were not very vocal about either the core of the law or their normative preferences.

Second, change to *Hadley* was delayed considerably by *The Heron II*. The latter judgment was taken to contain a definitive statement of the probability threshold implied in the phrase 'arising naturally'. This would count against my argument. But it is worth noting that by defining 'naturally' as 'not unlikely', the courts only succeeded in shifting the problem to the next level of specificity, namely that of the factors that go into this calculation.¹⁰⁰ The outcomes did not become any less indeterminate. The cause of the indeterminacy may, however, have become harder to detect.¹⁰¹

Third, 154 years lapsed between *Hadley v Baxendale* and *The Achilles*. This is despite *Hadley's* very wide penumbra and despite the high frequency with which damages disputes come before the courts. The implication is that if the process to which I refer exists, it takes a very long time to come to fruition. This may have to do with the English equivalent of *certiorari*, which is very stringent. There may also be other reasons. I speculated earlier that uncertainty rises every time a new defeasible premise is introduced. If this is correct and legal change is still slow, then it might be that the Supreme Court will tolerate a relatively high degree of indeterminacy before intervening.

A fourth, and related, point concerns the extent to which judges can measure uncertainty relative to their ability to gauge other legal desiderata, such as efficiency and fairness. I think it is safe to assume that judges are generally good at spotting uncertainty. This is so because it is their job to apply laws, and they know which ones are difficult to apply and which ones are easy. Whether they are good at finding allocatively optimal or fair solutions is, conversely, open to question. Out of the three explicit attempts at changing

⁹⁹ Recall that the majority was completed by Lord Walker, who was also in agreement with the minority.

¹⁰⁰ For an example of the diversity of factors that could be taken into account just prior to *The Achilles*, see *Aldgate Construction v Unibar Plumbing & Heating* (2010) EWHC 1063 (TCC) at [24]-[36].

¹⁰¹ What I have in mind here are Lord Hoffman's observations at n 98.

the core of *Hadley v Baxendale*, not a single one contains a mention of the economic properties of that law. Talk of certainty, on the other hand, abounds.

Fifth, I said earlier that although a law may in theory be changed by any court, in practice the Supreme Court (or its equivalent) controls the process. Attempts to change the core definition of remoteness at a level below the House of Lords, and now the Supreme Court, were detected and discarded almost immediately. Lord Denning found himself delivering a minority speech in *Parsons*. The arbitrator in *The Achilleas* was overruled by his fellow arbitrators, the High Court and the Court of Appeal, only to succeed by the narrowest of margins at the House of Lords.

Sixth, and last, I said that there is no reason to suppose that uncertain standards will always or even often be replaced by more certain ones. This is so because, on my hypothesis, the indeterminacy of the incumbent comes from the applicative statements that are added onto the standard, not from the standard itself. That prediction is in my view borne out by *The Achilleas*. That case instructs courts to look at the ‘background of market expectations’¹⁰² to determine an appropriate allocation of contractual risk. This is no less vague than ‘naturally’. It is unclear, among others, what the relevant market is, who constitutes it, or what qualifies as an expectation. The answer may vary from context to context: if in the shipping market a certain customary way of dealing is sufficient to establish an expectation, this does not have to be so in the financial markets. If some clause was the done thing in the financial market last year, it does not have to be so today. By way of tentative prognosis, it may therefore be expected that *The Achilleas* law will go the way of *Hadley*.¹⁰³

V. Conclusion

Let me now recapitulate. I began by explaining what contractual remoteness regulates. I then moved to describe the law as set out in *Hadley v Baxendale*. To Baron Alderson, whether a loss was too remote depended on whether it arose ‘naturally’ from breach. I then described how that test was replaced by the ‘implied agreement’ theory of remoteness in *The Achilleas*. Thereafter, I moved to describe the intervening cases. My argument, broadly, was that those cases made *Hadley*’s application more and more uncertain, up to a point where the Supreme Court no longer saw any reason to sustain it. In the fifteen decades between *Hadley* and *The Achilleas*, a number of potentially defeasible, ‘mixed’ holdings had made it very difficult to predict whether a given loss would be found remote

¹⁰² *The Achilleas* (n 7) at 23

¹⁰³ This corresponds to the prognosis in Lawson, K., ‘The Remoteness Rule in Contract: Holmes, Hoffman, and Ships that Pass in the Night’ (2012) 23 King’s LJ 1. A recent case seems to lend further credence to it. *SC Confectia* (n 27) above, in which it was held that the new law’s application may depend on who has control over the loss and on quantifiability. These appear to be defeasible premises of the type that eventually eroded *Hadley*. Beatson LJ also held that *The Achilleas* only applies in cases under the second limb of *Hadley v Baxendale*. This was an *obiter* statement. It is not entirely convincing: *The Pegase* is clear that there are not two limbs but one, and it was cited with approval in *The Achilleas*.

Chapter VII

METARULES VERSUS METASTANDARDS

Laws can be vague or specific. They can be rules or they can be standards. We may say that it is forbidden to drive at a dangerous speed – a standard. Or we may say that it is forbidden to drive at a speed exceeding 50 km/h inside a city – a rule. When the lawmaker chooses between rules and standards, he faces a dilemma. Standards impose costs on the legal system and on private citizens. Every time a case comes to trial, the judge has to expend considerable effort on deciding whether the speed at which the defendant drove was ‘dangerous’ in light of traffic and weather conditions, the defendant’s driving ability, his experience, the proximity of pedestrians, the time of day, the condition of the road, and so on. More importantly, under the standard it is difficult for drivers to predict whether and when they will be liable to a fine. A standard is also liable to be subverted: the outcome of a case may plausibly depend on the defendant’s socio-economic status, or, worse, on the venality of the presiding judge.¹ A rule, such as the 50 km/h speed limit, avoids those problems - the application of the law is reduced to a simple arithmetic operation, as is legal prediction and verification. But rules have costs too. To set a speed limit, the lawmaker must decide which speeds are dangerous, and when, and where. To make those decisions, he needs to inform himself on matters as varied as the general incidence of collisions, their likely consequences, the state of automotive technology, the ability of the median driver, the cost and reliability of the available enforcement technologies, and many others. To write rules, the lawmaker needs information. And information has a cost. The choice between rules and standards, then, becomes a question of measuring the cost of applying uncertain laws against the cost of writing certain ones.

¹ The point is more salient in the context of laws that govern the political system. Suppose that we are given a standard, such as ‘the President must be a fit and proper person’, and a rule, such as ‘the President must have no prior criminal convictions’. Under the standard, any person may become President if he can convince the judiciary, by whatever means, that he is ‘fit and proper’. The populace may question the court’s characterisation of that person as ‘fit and proper’, but any such argument is fundamentally contestable: one person’s scoundrel is another person’s saint. Under the rule, the populace can easily identify persons ineligible candidates with comparative ease, whatever the judiciary’s interpretation of the rule. Subversion under a rule is costlier. Rules in this context ensure fidelity to the law, a desideratum which is distinct from the cost of information to the lawmaker. A similar argument is developed in the context of developing countries in Schäfer, H., ‘Rules versus Standards in Rich and Poor Countries: Precise Legal Norms as Substitutes for Human Capital in Low-Income Countries’ (2006) 14 SCER 113, a contribution of which a summary is available in Chapter 2.

That is of course not a new line of argument.² My ambition in the instant composition is merely to extend it to a kind of law which has hitherto escaped attention in the literature.³ Many laws attach sanctions to conduct – murder triggers imprisonment, breach of contract triggers compensatory damages, speeding triggers a fine. These laws the literature covers amply.⁴ There are also laws which mandate a certain relationship between other laws. We say, among others, that no statute can override a constitution, that liability in tort and in contract is concurrent, and that if two statutes clash the more recent one prevails. I call such laws about laws ‘metalaws’.

Like ordinary laws, metalaws can be vague or specific. They can be metarules or metastandards. And the choice between metarules and metastandards involves a trade-off which is analogous, though not identical, to that between rules and standards. Metastandards are cheap to write but expensive to apply; metarules are expensive to write but cheap to apply. The argument, as far as I can tell, is novel.⁵ This by itself is liable to leave the chary reader at least a tad sceptical. That some theory has hitherto not been extended in some fashion does not automatically mean that the proposed extension is profitable. That is only the case when the extension yields some non-obvious conclusion.⁶

² Kaplow, L., ‘Rules versus Standards: An Economic Analysis’ (1992) 42 Duke LJ 557; Ehrlich, I. & Posner, R., ‘An Economic Analysis of Legal Rulemaking’ (1974) 3 JLS 257; Korobkin, R., ‘Behavioral Analysis and Legal Form: Rules v Standards Revisited’ (2000) 79 Oregon LR 23; Sunstein, C., ‘Problems with Rules’ (1995) 73 California LR 953; Friedman, E. & Wickelgren, A., ‘A New Angle on Rules versus Standards’ (2013) 16 ALER 499; Casey, A. & Niblett, A., ‘The Death of Rules and Standards’ (forthcoming 2017) Indiana LR. The debate is in no way restricted to law-and-economics. See Attiyah, P. & Summers, R., *Form and Substance in Anglo-American Law* (1987 OUP); Dworkin, R., *The Model of Rules* (1967) 35 UCLR 14, Shiffrin, S., ‘Inducing Moral Deliberation: On The Occasional Virtues of Fog’ (2010) 123 Harvard LR 1214; Rizzo, M., ‘Law amid Flux: The Economics of Negligence and Strict Liability in Tort’ (1980) 9 JLS 29; Sullivan, K., ‘The Supreme Court, 1991 Term. Foreword: The Justices of Rules and Standards’ (1992) 106 Harvard LR 22, and Diver, C., ‘The Optimal Precision of Administrative Rules’ (1983) 93 Yale LJ 65.

³ The only economic study of metalaws that I could find is Friedman, D., ‘Choosing Metarules for Legal Change’ (1992) 82 AER 285. That paper concerns issues of retroactivity. The concern in the instant paper is with indeterminacy.

⁴ For a discussion in the context of tort and contract, see Ayres, I. & Talley, E., ‘Solomonic Bargaining: Dividing a Legal Entitlement to Facilitate Coasean Trade’ (1995) 104 Yale LJ 1027; Johnston, J., ‘Bargaining under Rules versus Standards’ (1995) 11 JLEO 256; Katz, A., ‘The Economics of Form and Substance in Contract Interpretation’ (2004) 104 Columbia LR 496. In the context of developing countries, see Schäfer, H., ‘Rules versus Standards in Rich and Poor Countries: Precise Legal Norms as Substitutes for Human Capital in Low-Income Countries’ (2006) 14 SCER 113. In the context of European integration, see Weber, F., ‘European Integration Assessed in the Light of the “Rules versus Standards” Debate’ (2013) 35 EJLE 187.

⁵ It would appear that the only other contribution in which the term has been used is Merrill, T., ‘The *Mead* Doctrine: Rules and Standards, Meta-Rules and Meta-Standards’ (2002) 54 Administrative L Rev 807. Professor Merrill’s concern there is with the actions of US administrative agencies and the appropriate standard for review.

⁶ One further reason why an extension of a pre-existing theory might be profitable is if it shows that a certain problem is larger (or smaller) in magnitude than previously thought. I suspect the points developed here might pass that test too. An uncertain “ordinary” law of the type discussed in the literature imposes uncertainty costs only on those whose behaviour it governs or affects. If the conditions for obtaining an alcohol license are unclear, this affects publicans and also prospective patrons. But the cost is not directly born by persons who do not frequent licensed premises. Uncertain metalaws, on the other hand, render all the ‘ordinary’ laws that they govern uncertain. If we were unsure whether the constitution always trumped statute, this would leave the validity of *all* constitutional provisions and *all* statutory instruments open to question. All law that is either constitutional or statutory would become harder to apply. If this is right, then the magnitude of the problem of metarules and metastandards, which I discuss here, is much larger than that of rules and standards.

Of those I believe there to be at least two. Firstly, I show that when judges make law, they must favour metastandards and that the legislature, when it drafts statute, may use metarules.⁷ Secondly, I apply my theory to two rubrics in international law, namely the public order exception in international private law and the *kompetenz-kompetenz* problem in the European Union. In both cases, the legal framework is vague and it might thus appear dissatisfactory. I show that its ambiguity may very well be justifiable for considerations of informational economy.

The exposition is structured as follows: Part II defines the basic elements of the analysis. Part III discusses precedent within those terms, and introduces the metarule-metastandard dichotomy. Part IV provides an example from the English law of contract. In Part V, I discuss statute. In Part VI, I compare statute and precedent. Part VII is an extension of the analysis into *kompetenz-kompetenz* and the public order exception. Part VIII concludes.

I. Definitions

The arguments here are to a large extent based on propositional logic. At the same time, the focal points are patterns of human behaviour rather than formal objects. In order to align the subject matter and the methodology, I propose to begin by adopting some definitions.

The first point to note is that when I say ‘a law’ here, I do not mean ‘all law’ or ‘the law’, but rather two specific types of statement found frequently in legal systems. Firstly, by ‘a law’ I mean a statement that identifies the *conditions* in which the state will deploy its coercive machinery against some individual. For example, we may say that ‘if a person drives a car at a speed in excess of 50 km/h in a city, they shall be liable for speeding’ or that ‘if a person negligently harms another, they shall be liable in tort’. Secondly, ‘a law’ in this text also denotes a statement that specifies the *nature* of the coercive action which the state will take against individuals if their liability is established. For example, we may say that ‘speeding is punishable by a fine of £500’ or that ‘a person liable in tort must pay damages equal to the harm suffered by the victim’. The term ‘a law’, then, denotes sanctionability conditions and sanctions.⁸ I have decoupled the two here, but they may

⁷ The capital consequence is that the common law might be inferior, in certainty terms, to the civil law. This runs contrary to a point which is well-established in the law-and-economics literature – see for example Landes, W. & Posner, R., ‘The Independent Judiciary in an Interest-Group Perspective’ (1975) 18 JLE 875; Priest, G., ‘The Common Law Process and the Selection of Efficient Legal Rules’ (1977) 6 JLS 65; Rubin, P., ‘Why is the Common Law Efficient?’ (1977) 6 JLS 51; Posner, R., ‘What Do Judges and Justice Maximize? (The Same Thing Everyone Else Does)’ (1993) 3 Supreme Court Econ Rev 1; Gennaioli, N. & Shleifer, A., ‘The Evolution of Common Law’ (2007) 115 JPE 43; Miceli, T., ‘Selective Litigation, Judicial Bias, and Precedent’ (2008) 38 JLS 157; Ponzetto, G. & Fernandez, P., ‘Case Law versus Statute Law: An Evolutionary Comparison’ (2008) 37 JLS 379. I am of course not the first to doubt the ‘efficiency of common law’ hypothesis – see Faure, M. & Smits, J., (eds), *Does Law Matter* (2011 Intersentia). See also Priest, G., ‘Micro and Macro Legal Efficiency: Supply and Demand’ (2005) 13 SCER 19; Garoupa, N. & Liguierre, C., ‘The Syndrome of the Efficiency of the Common Law’ (2011) 29 BUIJL 287

⁸ This decoupling is necessary since sanctionability conditions and sanctions exhibit some functional differences – see Nance, D., ‘Rules, Standards, and the Internal Point of View’ (2006) 75 Fordham LR 1287, 1309-14. The distinction is similar to that between rights and remedies. The primary function of a statement of a right is to inform those who obey the law because it is the law that such-and-such statements forms part of that law. There

(and often are) combined. For instance, from the statements given above we may infer that 'if a person drives a car at a speed in excess of 50 km/h, they shall be liable to a fine of £500' and that 'if a person negligently harms another, they shall be ordered to pay damages equal to the harm suffered by the victim'. More generally, it can be said that a sanctionability condition is a statement such as 'if facts X are shown, liability Y is established', that a sanction is statement such as 'if liability Y is established, sanction Z is applied', and that the two may be abbreviated to a single statement, such as 'if facts X are shown, sanction Z is applied'.

Let me now define precedent. A body of law is precedential if its constituent laws are exclusively derived from past court judgments.⁹ A court judgment is a description of an adjudication which contains a statement of the material facts, a dispositive part indicating the outcome, and an explanation of the relationship between the two. In line with the prevalent school of jurisprudential thought, I will assume that it is the explanatory part which is binding.¹⁰ A precedential system, therefore, is one in which laws are also

is also the auxiliary end of the deterring potential violators. The primary function of a statement of a remedy is to inform those who obey the law only when it suits them that if they disobey some law, such-and-such consequences will follow. And it too serves an auxiliary end, in that those who generally obey the law are reassured that the law is enforced. As Professor Nance shows, the distinction matters for the choice between rules and standards. For the choice between metarules and metastandards, however, it makes no difference. This is so because both sanctionability conditions and sanctions are governed by the same metalaws. A constitutional prohibition on cruel and unusual punishment would trump both a statute which holds the mentally ill liable for their acts, a sanctionability condition, and a statute which specifies drawing and quartering as the punishment for some crime, a sanction. If the metalaw is uncertain - for example if it is unclear whether the constitution trumps statute in general - then the resultant uncertainty is also the same in both instances. It is for this reason that, from this point onwards, I treat sanctionability conditions and sanctions as being alike.

⁹ This definition evidently does not cover entire national systems, since in practice there is always more than one source of law. But it does subsume large parts of some real systems. For example, in England the laws of contract, tort, and the constitution are almost exclusively judge-made. The same is true of other jurisdictions: for example, it is apparently very difficult to describe the administrative law of France without structuring it around judgments of the *Conseil d'Etat*: see Troper, M. & Grzegorzczak, C., 'Precedent in France' in McCormick, N. & Summers, R., (eds.), *Interpreting Precedents: A Comparative Study* (1998 Routledge).

¹⁰ There is also a 'narrow' definition of precedent. It says that the facts and outcomes of past judgments are binding, but the explanation of their relationship is not. This restricts the function of precedent to ensuring that the same cases are decided in the same way: if some set of facts has been determined to trigger a certain outcome in the past, then the second time these facts appear before the courts the outcome must be the same. But if it can be shown that the facts now before the courts are in some way different from the ones that were before the previous courts, then the outcome must be determined *de novo*. Under the broad definition of precedent, explanations given in the past are also binding. This means that even if the facts of a new case are different from the facts of an old one, the outcome will be the same provided that the relationship can be explained in the same way. By way of example, suppose that the facts are that X fed her child cyanide, the outcome is that she is sent to prison, and the explanation is that she was grossly negligent. Then a new case comes up before the courts whose facts are that Y has fed her child arsenic. Under the narrow interpretation of precedent, the court is not bound by *R v X* and is free to decide whether feeding one's child arsenic is illegal afresh. Under the broad interpretation of precedent, the court has no choice but to follow *R v X* and send Y to prison: although the facts are different, they can be subsumed under the same explanation. What I called the 'narrow' interpretation here seems, at first glance, to have been favoured by Professor Goodhart in Goodhart, A. (1957) 20 MLR 587. There, he defined the ratio of a case as its material facts coupled with the outcome. A number of the leading authorities of the time argued for what I called here the broad definition: Simpson, A., 'The Ratio Decidendi of a Case' (1958) 21 MLR 155; Montrose, J., 'Ratio Decidendi and the House of Lords' (1957) 20 MLR 124 and Stone, J., 'The Ratio of the Ratio Decidendi' (1959) 22 MLR 597. This prompted Professor

explanations of past fact-outcome relationships. Explanations, and thus laws, are expressed at a higher level of generality than facts and outcomes.¹¹ Therefore, a law derived from one judgment subsumes not only the facts under consideration in that case, but also the facts in others. It must therefore be true that in a precedential system, if it is found that two sets of facts can be subsumed under the same law, then the two must also trigger the same outcome.

Having defined precedent thus, let me now turn to indeterminacy. Since I discuss metalaws and those metalaws prescribe a hierarchy between other laws, I will also define a specific type of indeterminacy, which I call hierarchic. Indeterminacy in general may be said to exist where a particular set of facts does not trigger any outcome with a probability of one. That indeterminacy is hierarchic when it stems from the existence of two or more laws which subsume the same set of facts but which point to different outcomes.¹²

How hierarchic indeterminacy arises is perhaps best seen in a hypothetical. Since I will have frequent recourse to it, I should note now that I have deliberately set it up to be absurd. To do otherwise would be to invite discussion of real legal doctrines, which would at present only muddle the argument. I only ask the reader to suspend her disbelief momentarily – once the fundamentals are in place, I will provide several real-world examples. With this caveat in mind, I move to the hypothetical. Suppose that in *R v A*, the facts were that A killed X, the outcome was that A was found liable for murder, and the explanation was that his actions were immoral. Because the system is precedential, the explanation becomes a law: all facts that can be subsumed under the label ‘immoral action’ should trigger liability for murder and all facts that cannot be thus subsumed should trigger no liability for murder. Suppose now that in *R v B*, the facts were that B killed Y, the outcome was that he too was found liable for murder, and the explanation was that he killed Y intentionally. Thus, from *R v B* we derive a law which stipulates that if a set of facts can be subsumed under the label ‘intentional killing’, the outcome should be liability for murder. If the facts cannot be subsumed under this label, the defendant is not liable for murder. Now suppose that C falsely tells his brother Z that he has been cavorting with

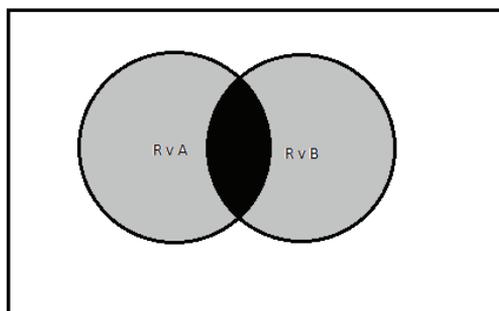
Goodhart to clarify his position, which was that the ratio is the way in which the judge connects the facts to the outcome: Goodhart, A., ‘The Ratio Decidendi of a Case’ (1959) 22 MLR 117.

¹¹ Schauer, F., ‘Giving Reasons’ (1995) 47 Stanford LR 633 cf Schauer, F., ‘Why Precedent in Law is not Totally (or Substantially) about Analogy’ (2008) 3 PPS 454.

¹² In the classical expositions of the subject, the concern is normally with the linguistic indeterminacy of a single law. For example, the law says that persons who do not exercise ‘reasonable’ care are liable in negligence. Suppose that the facts are that T, a doctor, failed to give muscle relaxant to his patient T before administering an electroshock. (*Bolam v Friern Hospital Management Committee* [1957] 1 WLR 582). The law is indeterminate because it is not clear whether failing to give relaxant to a patient is ‘unreasonable’: some may say that the word ‘reasonable’ in the context of electroshocks means ‘having administered electroshock’, others may say the very opposite. This type of linguistic indeterminacy has benefitted from considerable attention in the literature, to which I presently cannot add. I can only refer to a few of the leading works here. The best known, to my knowledge, are Holmes, O., ‘The Theory of Legal Interpretation’ (1899) 12 Harvard LR 417; Roscoe Pound, R., ‘The Theory of Judicial Decision: The Materials of Judicial Discretion’ (1923) 36 Harvard LR 641; Dworkin, R., ‘The Model of Rules’ (1967) 35 UCLR 14; Kennedy, D., ‘Form and Substance in Private Law Adjudication’ (1976) 89 Harvard LR 1685.

his wife. *C*'s sole purpose in doing this is to tease *Z*. *Z* takes his brother's fabrications at face value. The shock causes him to suffer a heart attack and he dies. *C*'s actions can be subsumed under the label 'immoral behaviour', and therefore $R \vee A$ dictates that he should be liable a murder. *C*'s actions cannot, however, be subsumed under the label 'intentional killing', since he did not intend to kill his brother but merely to tease him. Therefore, $R \vee B$ dictates that he should not be liable for murder. $R \vee A$ and $R \vee B$ are deadlocked.¹³ It is this type of deadlock that I call hierarchic indeterminacy.

The mathematically-minded might find a diagrammatic representation helpful. Recall that under the definition of precedent used here, the explanation of a fact-outcome relationship is a law. Since an explanation is by definition more general than the elements which are being explained, it may be said that an explanation covers a number of factual matrices which ought to trigger the same outcome. The totality of those factual matrices is a set, which can be represented in a Venn diagram. Here, I represent two laws, $R \vee A$ and $R \vee B$ respectively, as sets. The area shaded in black represent conduct which certainly triggers liability. The white area represents conduct which certainty does not trigger liability. The area shaded in grey represents indeterminacy.



We know that there will be liability if the facts fall in the intersection of $R \vee A$ and $R \vee B$.¹⁴ We also know that there will be no liability if the facts fall outside of the complement of the union of $R \vee A$ and $R \vee B$. The legal system is, however, indeterminate when a behaviour falls in the relative complement of $R \vee A$ in $R \vee B$ or in the relative complement of $R \vee B$ in $R \vee A$. We do not know what the outcome will be if the facts are sanctionable under one law but not under another.¹⁵

¹³ Technically, the judge in $R \vee C$ has a choice between following $R \vee A$ or following $R \vee B$. The likelihood that he will choose to follow one or the other is fifty percent. If this situation persists, the law means one thing in half of the cases and another in the rest. Kaplow (n 1) refers to these situations as 'aberrations'. This work can be interpreted as an attempt to explain why, how, and when these aberrations occur.

¹⁴ This covers situations, in the example, above, where the conduct in question is both immoral and constitutes intentional killing: the two rules point at the same outcome.

¹⁵ If *C* kills *Z* in the course of a war, then we can say that the killing was intentional but not immoral. Under the two substantive laws that we are given here, we do not know what the outcome will be: the case falls in the relative complement of $R \vee B$ in $R \vee A$. Conversely, if *C* tells *Z* tall tales about his wife and this causes *Z*'s death,

I must now introduce a couple of caveats. Not all laws are hierarchically indeterminate. The deadlock in the hypothetical arises, in logical terms, for two reasons. Firstly, the categories ‘intentional killing’ and ‘immoral action’ overlap. Secondly, it is impossible to tell which is specific to the other.¹⁶ It may be that intentional killing is illegal when it is immoral, in which case C is not liable. Or it may be that intentional killing is illegal because it is immoral, in which case C is liable. It cannot be said that the same relationship obtains between every conceivable pair of laws. For example, if the outcome in $R \vee A$ had been explained by reference to the proposition that ‘murder carries a penalty of life imprisonment’ and if in $R \vee B$ it had been said that ‘murder is the unlawful killing of another human with malice aforethought’, the two explanations would be hierarchically determinate.¹⁷ The phrasing of the second makes it clear that it is specific to the first. Likewise, if in $R \vee X$ it is said that ‘drawing swastikas on cars is conspiracy to outrage public decency’ and in $R \vee Y$ that ‘running brothels is not conspiracy to outrage public decency’, there is no hierarchic indeterminacy. Here, the plain meanings of the two laws do not overlap: drawing swastikas on cars cannot be an example of running a brothel, and vice versa. In formal terms, it may be said that two laws are hierarchically determinate if their meanings do not overlap or if they do overlap but form one (and only one) syllogism.¹⁸ To such laws my theory has no application.

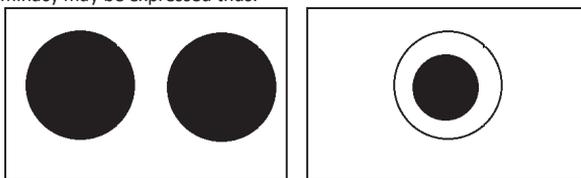
The second caveat is that my theory only applies where the courts attempt to define laws as conditions that are both necessary and sufficient. The law I derived from $R \vee A$ was that ‘immoral action’ triggers liability for murder and also that anything that is not ‘immoral

then the actions in question are immoral but they are not intended to cause death: the case is in the relative complement of $R \vee B$ in $R \vee A$.

¹⁶ In the terms of Kaplow (n 1), it is impossible to tell which is the rule and which is the standard.

¹⁷ Note that in this example precedent serves to make the law *more* determinate linguistically: we acquire an example of the usage of the term ‘murder’ and thus know its meaning better. This is the standard sense in which precedent is discussed, as for example in Kaplow (n 1) and in Ehrlich & Posner (n 2). It is for this reason that I use the term hierarchic determinacy rather than determinacy *tout court*.

¹⁸ Hierarchical determinacy may be expressed thus:



The diagram on the left shows the position when ‘playing loud music’ and ‘driving at an excessive speed’ are illegal. The part which is shaded in black covers facts which certainly trigger a sanction, and the part in white indicates facts which certainly do not trigger any sanction. Since the two sanctionability conditions do not overlap, there are no cases in which the two might be said to govern at the same time. The diagram on the right shows the position when it is said that ‘murder is a crime’ and that ‘murder means the unlawful killing of a human being with malice aforethought’. The second is contained entirely in the first. As a result, it simply excludes some possible meanings of the word ‘murder’ (such as the killing of an animal) from the sanctionability condition. Since there is no other way of interpreting the second law, there is no hierarchic indeterminacy. If the reader subscribes to the view that all law is ultimately a syllogism, she will find these pages utterly irrelevant. That view, it must be said, is somewhat old-fashioned: the most recent publication to advocate this as a realistic conception of the law is, to my knowledge, Lucas, N. ‘Logic and Law’ (1919) 4 Marquette LR 203.

action' does not trigger liability for murder. This is credible in a criminal law context, because there the desire for certainty makes it likelier that courts of precedent will attempt to state the law definitively. But sometimes courts announce conditions that are merely sufficient. For example, a court may announce that an agent who accepts bribes holds them on constructive trust for his principal.¹⁹ When the court does that, it does not mean to indicate that those who do not accept bribes do not hold any property on trust for anyone. More generally, sometimes – especially in criminal law but also, as we will see, in the law of contract and in international law – the courts hold that some set of factual matrices trigger liability and that all factual matrices outside of that set never trigger liability. My theory applies to such statements. In other instances, the courts merely hold that some set of factual matrices triggers liability for some wrong or crime, without however excluding the possibility that other factual matrices also trigger the same liability. Nothing that I say here applies to holdings of that second type.²⁰

The final term which I want to define here is 'metalaw'. For what I perceive as ease of exposition, I will begin with a definition which is negative and incomplete. A metalaw is a statement that forms part of the legal system but which does not contain a sanctionability condition or a sanction. Ordinary laws, as I defined them, take forms such as 'if facts X, Y and Z are shown, then the defendant is liable for M' or 'if liability M is established, sanction N follows'. Metalaws, conversely, cannot by themselves trigger coercive action by the state.²¹ What, then, is their positive function? A metalaw is a mandatory technique for disambiguating substantive law. Take the ubiquitous rule that no statute can override a constitution. It is impossible to bring a claim against anyone on the basis of this provision alone: it alludes to neither acts nor sanctions. This does not, however, render it meaningless. Suppose that there is in the constitution a provision which guarantees the right to free speech, and that in the same polity a statute has been passed which imposes a fine of £1,000 on anyone who criticizes the President. The two laws are hierarchically indeterminate: if I criticize the President, the statute says I should be fined and the constitution that I should not. The metalaw mandates that only one of

¹⁹ *Attorney General for Hong Kong v Reid* [1993] UKPC 36

²⁰ Is this fatal to my argument? This would be true if it can be shown that *no* necessary and sufficient conditions can ever be derived from precedent. I do not think this holds as a matter of practice. For example, in *Rookes v Barnard* [1964] UKHL 1 it was held that punitive damages are permissible where servants of the government acts oppressively, arbitrarily, or unconstitutionally and where the defendant's conduct was calculated to make a profit which exceeds the compensation due to the plaintiff. It would, I think, be absurd to treat Lord Devlin's speech as indicating that those are two of many situations in which punitive damages are permissible. I merely give the example of punitive damages since it is one with which many are likely to be familiar. It is possible to conceive of many other instances in which the courts have attempted to lay down necessary and sufficient conditions, some of which I discuss here. I do not propose any theory of what it might be that impels courts to announce necessary and sufficient conditions in some cases and merely sufficient ones in others. I restrict myself instead to saying that the former practice is common enough to warrant attention.

²¹ The definition is only partial because while it does include every law that is a metalaw, it also includes some laws which are not. For example, the internal rules of parliaments and the rules of civil procedure are also caught, so far as they do not trigger sanctions. But they do not serve the disambiguatory function which is critical to the concept in the form in which I have deployed it here.

those interpretations is valid: since any outcome which is inconsistent with the constitution is invalid, the only possibility is that criticizing the president is lawful.

Before I move to the interplay between those concepts, I want to make a methodological point. The content, but not the names, of the concepts I introduced resemble very closely the fundamentals of HLA Hart's theory.²² This reflects a conscious choice on my part, and not that of simulating novelty. Some Hartian terms are also often found in law-and-economics. But there, they are taken to have very different meanings: a rule is one thing to Hart and quite another to Kaplow; likewise uncertainty. Since the subject of this essay comes very close to the conflux of law-and-economics and analytical jurisprudence, confusion between the two is I think best avoided through the use of terms which are, as between the two, neutral. What I propose to do now, very briefly, is to translate my terms to their Hartian equivalents and to say, more generally, how what I say here relates to what Hart said before.

The distinction between laws and metalaws here is closely analogous to the distinction between primary and secondary rules.²³ Laws, as I defined them, are essentially analogous to those rules which Hart said were addressed at the general public. Laws, on my definition, include both what Hart called sanctions²⁴ – the prohibition on murder, for example – and what he called private power-conferring rules²⁵ – such as the rules specifying the conditions for the validity of wills. The way in which I have used the term 'law' here, however, does not include public power-conferring rules, such as those which indicate who may act as judge or those which confer powers on administrative agencies. Those laws define neither the conditions in which the state will act, nor the substance of its actions. My theory, then, cannot apply to their content.

Metalaws in my framework correspond to secondary rules in that developed by Hart. A metalaw is simply a command, addressed at a public official, to apply some law instead of another. Hart distinguished between three kinds of secondary rules – rules of recognition, rules of change, and rules of adjudication.²⁶ Metalaws cover the first two, but not the third. A rule of recognition can be a metalaw – for example, when a dispute turns on whether *R v A* or *R v B* should govern *R v C*, the question may easily be framed as whether it is *R v A* or *R v B* that should be recognised as the valid rule to apply to the case of *R v C*. The same is true of rules of change: in the same setup, the dispute may validly turn on whether the court in *R v B* was allowed to change the law in *R v A*, or on whether the court in *R v C* is free to change the law itself. But a metalaw is not, generally, a rule of adjudication: for example, when we say that a person may appeal a judgment to the

²² See generally HLA Hart, *The Concept of Law* (2nd edn, 1994 OUP)

²³ *Ibid* at 80ff.

²⁴ *Ibid* 26

²⁵ *Ibid* 38ff

²⁶ *Ibid* 94ff

highest court of some country, that secondary rule makes no reference to any primary rules – it merely specifies the identity of the officials that might apply them.²⁷

Now that I have drawn the obvious parallels, let me attempt to define the subject matter of my work – hierarchic indeterminacy – along Hartian lines. Hart spoke of the ‘open texture’ of rules both primary and secondary.²⁸ And he said that primary rules are addressed at individuals and secondary rules at officials.²⁹ Now, the point that I make here is this: private individuals might find primary rules vague, which is the standard case discussed in the literature. I do not discuss that here. It is also possible that private individuals will attempt to anticipate which primary rules will be applied to them, in which case they must look at the secondary rules. When they do that, the individuals concerned might find that the secondary rules are vague too. The vagueness of the secondary rules is what gives rise to hierarchic indeterminacy.³⁰ In the *R v A* and *R v B*, the primary rules are uncertain – ‘intentional’ and ‘immoral’ are both concepts with a wide penumbra. But the particular problem in *R v C* arises not because of the wide penumbra of those terms – the facts may confidently be assumed to fall in the core of both ‘intentional killing’ and ‘immoral action’ – but because there is no sufficiently certain secondary rule that tells officials which of the two criteria to apply when they clash. Hart

²⁷ Public power-conferring rules are generally amenable to the traditional analysis developed in the literature: there is a choice between saying that judges must be ‘persons of good standing’ and saying that judges must be ‘persons with no prior criminal convictions’. The former is cheaper to write but more difficult to apply in individual cases. The latter is easier to apply, but adopting it requires us to make more choices and to invest in more information – do we, for example, want to exclude conscientious objectors from judicial office? It is theoretically possible that there will be two eligibility laws that clash, in which case my theory applies. But that probability is very remote, which is why I believe it is best to exclude it.

²⁸ Hart (n 22) 125ff and also Hart, H., ‘Positivism and the Separation of Law and Morals’ (1958) 71 Harvard LR 593, 607-15. There is a supplementary point that might be worth mentioning here. I defined indeterminacy as a state of affairs in which legal outcomes are not predictable with a probability of 1. Hart spoke of ‘open texture’. The two might seem very different. But I do not think they are. Firstly, one may say that my ‘formal’ definition implies that the application of some laws is predictable with a probability of 1, whereas Hart explicitly adopted the ‘open texture’ version to indicate that *all* language is uncertain. I do not, however, mean to imply that law can be perfectly certain. It is perfectly possible, under my definition, that all disputes entail some element of unpredictability. It is not inconceivable that no prognosis can ever be made with a probability of 1. Secondly, it might be thought that my ‘numerical’ view of indeterminacy is inaccurate: it is generally very difficult to put an exact figure on the probability with which a certain legal outcome will obtain. So Hart’s version is more accurate. I readily concede this. My use of numbers here is purely illustrative. I have chosen to adopt it because the reader, especially if a legal economist, will likely find the numerical examples easier to follow. In using ‘formal’ probabilities, I do not mean to indicate that those probabilities are accurate – I merely wish to denote the idea, which is not at all absent from Hart’s work, that some laws (or rules, in his language) have wide cores and narrow penumbrae and others have relatively narrower cores and broader penumbrae. For example, if we are given two laws, one prohibiting ‘immoral action’ and another prohibiting ‘driving at over 50 km/h’, Hart would say that the first has a narrower core than the second. I would say that under the first outcomes can be predicted with a probability which is smaller than that with which outcomes can be predicted under the second. Although the terminology is different, the meaning is, as far as I can tell, the same.

²⁹ Ibid 116-7

³⁰ Hart did not discuss the point at any length, but he did hint at the existence of such a problem: ibid 134-6, where he discusses the difficulties of applying the rule of precedent, of distinguishing between *ratio* and *obiter*, and of canons of interpretation. A similar point is made at ibid 251, where he points out that the rule of recognition has a penumbra – its purpose is not the elimination of all uncertainty.

noted that secondary rules might be uncertain in their own right.³¹ What I do here is to take on from that point and to apply an economic theory of legal certainty to the problem.

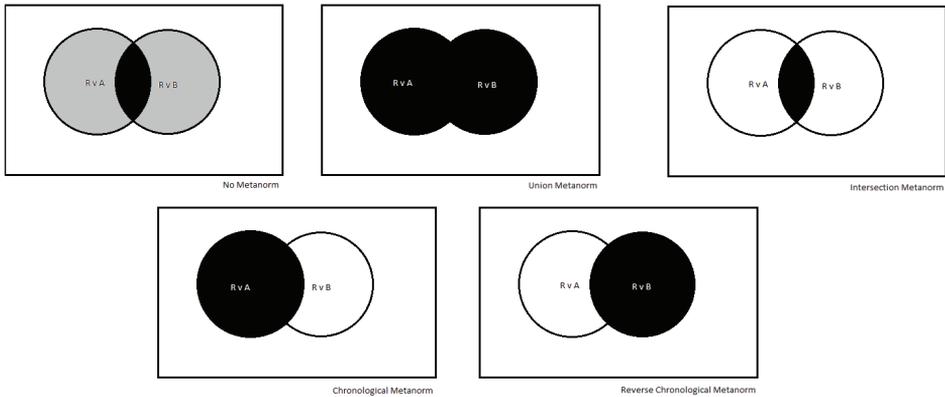
II. Precedent

So much for method and definitions. There is an obvious interplay between metalaws and hierarchic indeterminacy. Metalaws eliminate hierarchic indeterminacy. On careful examination, it turns out that this statement is only partially true: under precedent, the optimal metalaw is vague. And a vague metalaw eliminates hierarchic indeterminacy only in part. To convince the reader that this is correct, I believe it is best to begin by revisiting the simple case in which an otherwise indeterminate set of laws is rendered certain by a metalaw. Thereafter, I will progressively introduce complications, the purpose being to show that in actuality only partial disambiguation is desirable.

Consider again the hypothetical in which $R \vee A$ prohibits immoral behaviour and $R \vee B$ prohibits intentional killing. The two laws derived from those cases are indeterminate when the facts point to immoral behaviour which is not intentional killing and also when there is an intentional killing which is not immoral behaviour. There are four metalaws which eliminate the indeterminacy. First, we may say that the facts trigger liability for murder only when they can be subsumed under both $R \vee A$ and $R \vee B$. I will call this the intersection metalaw. Second, we may say that the facts trigger liability when they can be subsumed under either $R \vee A$ or $R \vee B$. I will call this the union metalaw. Third, we may say that the facts trigger liability when they can be subsumed under $R \vee A$ only. Since $R \vee A$ was decided first, I will call this the chronological metalaw. Fourth, we may say that the facts trigger liability when they can be subsumed under $R \vee B$ only. I will call this the reverse chronological metalaw.

All four of those metalaws eliminate hierarchic indeterminacy. Immoral behaviour which is not intentional killing triggers liability for murder under the union metalaw and the chronological metalaw. It triggers no liability under the intersection and the reverse chronological metalaw. Intentional killings which are not immoral trigger liability under the union metalaw and the reverse chronological metalaw but not under the other two. All of those prognoses are true with a probability of one. Provided that one of the four metalaws is selected, there will be no hierarchic indeterminacy. As before, the solutions can be expressed graphically:

³¹ Ibid 94-5, 134-6, 251, 261-4



The simplicity of the hypothetical is, however, misleading. The underlying assumption is that the cases are decided first, and then a metalaw is chosen. In a precedential system, law production occurs continuously. Therefore, it is not possible to choose a metalaw after all the cases are decided. The lawmaker cannot wait for all litigation to end before saying what rules governed it. It is necessary to announce a metalaw *ex ante*.³²

Can it be said that all four metalaws solve hierarchical indeterminacy *ex ante*? This would be true if a given set of facts is guaranteed to trigger the same outcome at all times. Out of the four options that I posited, only the chronological metalaw is *ex ante* determinate. Under the union metalaw, there is the possibility that a postcedent case will expand the set of sanctionable facts. Under the intersection metalaw, that set can contract. And under the reverse chronological metalaw, the old set can be substituted with a new one at any time. It is only under the chronological metalaw that the first law to be announced is immutable. Thus, from the perspective of hierarchic determinacy, all metalaws are equal *ex post* and the chronological metalaw dominates all others *ex ante*.

The analysis above proceeds from the assumption that determinacy is, in the choice of metalaws, the only thing to be considered. Let us now vary this assumption and posit that, in selecting metalaws, we aim to ensure that the substantive content of the law reflects the information which we currently have at our disposal. That is at least as valid an aspiration as determinacy: we probably do not want the law of property to reflect the once-prevalent view that humans may be chattels, nor do we want the law of abortion to reflect sixteenth-century medical knowledge. Since our stock of information is constantly changing, to avoid this we must make the system flexible – we would want to be able to change the law from time to time. Flexibility cannot be attained under a chronological metalaw. Under that regime, the first judgment in time fixes the content of the law forever. Once a court decides that humans are chattels or that abortion is witchcraft, no future

³² By this I mean that a metalaw must be announced before any substantive laws are introduced. In the law-and-economics literature, the phrase is sometimes used to denote the idea of something happening before an agent acts. Since the laws that I discuss here concern other laws rather than conduct, the point of temporal reference changes accordingly.

court can change that. Flexibility is maximised by selecting the opposite metalaw. Under the reverse chronological metalaw, we may update a law every time new information reaches the courts. As soon as the courts realise that humans are not chattels or that abortion is not witchcraft, they may update the law in line with their now-superior information. So far as flexibility is concerned, the reverse chronological metalaw dominates all the others strictly.³³

Thus it emerges that if determinacy taken as a unique desideratum, a chronological metalaw is optimal. If it is only flexibility that we want, its exact opposite is preferable.³⁴ This is of course not novel.³⁵ Realistically, we would want the legal system to be both determinate and flexible: we want the legal system to be neither bad and certain nor good and random. Anything between these extremes is unattainable if the choice of metalaw is limited to the four options which I introduced at the start. Depending on the maximand, the chronological metalaw and its opposite dominate all the others strictly.³⁶ But if the

³³ Under the union metalaw, a new case can expand the boundaries of sanctionability but it can never contract them. Once it is decided that immoral behaviour is illegal, it is impossible to introduce exceptions. Under the intersection metalaw, it is possible to introduce exceptions but never to expand sanctionability. It is impossible to make intentional killing unlawful independent of its morality. The union and intersection metalaws, then, offer *some* flexibility, but not as much as the reverse chronological – there is always some part of the law as set out in the first judgment that a future court cannot change.

³⁴ This might appear counterintuitive, especially to the common lawyer. The ‘union’ and ‘intersection’ metalaws resemble ‘distinguishing’ at common law. Thus in some cases, the judge says that the case before him is dissimilar to the leading one. The disanalogy means that a new rule has to be created. If the new rule is that the instant facts trigger liability, then there is a similarity with the union metalaw. If the new rule is that the instant facts do not trigger liability, then it is possible to speak of an ‘exception’ to the leading case. This is like the intersection metalaw. That intuition is in fact misleading, since under the approach advanced here the judge who makes an exception or creates a new offence is in fact achieving this through the reverse chronological metalaw, by merely repealing the previous law and replacing it with a new one. That the two overlap is only incidental. A ‘true’ union metalaw means that once a certain type of behaviour has been declared unlawful, it cannot be decriminalized. A ‘true’ intersection metalaw is one in which no new heads of liability can ever be added to those already in existence.

³⁵ See Hathaway, O., ‘Path Dependence in the Law: The Course and Pattern of Change in a Common Law System’ (2001) 86 Iowa LR 2001; Fon, V., et al, ‘Litigation, Judicial Path-Dependence, and Legal Change’ (2005) 20 EJLE 43; Ponzetto & Fernandez (n 7); Gennaioli & Schleifer (n 7).

³⁶ That is true of the two maximands I discussed here. It is also possible to conceive of maximands under which the other two metalaws are the most desirable. Suppose that instead of flexibility or certainty, we wish to maximise the system’s path independence. By this I mean that we wish to ensure that the order in which cases come to be decided has no influence on the substantive content of the law. For simplicity, we may assume that only $R \vee A$ and $R \vee B$ will be decided, and that in both the only possible holding is that murder will be defined as ‘immoral action’ in the $R \vee A$ and as ‘intentional killing’ in $R \vee B$. Under the chronological metalaw, the system would be path dependent – if $R \vee A$ is decided first and $R \vee B$ is decided second, then acts which are intentional killings but are not immoral will constitute murder. If $R \vee B$ is decided first and $R \vee A$ second, then such acts will never constitute murder. The definition of murder depends on the order in which cases come to be decided – there is path dependency. The same holds under a reverse chronological metalaw, only the substance of the law is switched – if $R \vee A$ is decided before $R \vee B$, $R \vee B$ will trump $R \vee A$, so intentional but moral killings would be murder. If $R \vee B$ is decided before $R \vee A$, $R \vee A$ will enjoy precedence and those same killings would not be murder. Again, the law depends on the order in which cases are decided – an arbitrary criterion. The intersection and the union metalaw dominate. Under the intersection metalaw, provided that both $R \vee A$ and $R \vee B$ have already been decided, it will always be necessary for an act to be both an intentional killing and immoral for it to qualify as murder. The time at which each criterion is defined would be irrelevant. Under the union metalaw, it would always be sufficient for an act to be either an intentional killing or immoral for it to be murder. Again, it does not matter when the cases in question have been decided. It follows that, if we want a system in which the

chronological metalaw is chosen, the law is set in stone after the first judgment. And under the reverse chronological, the legal system becomes radically indeterminate.³⁷

In technical terms, there is a trade-off between determinacy and flexibility. Under the chronological metarule, the cost of inflexibility may be very high. Under its opposite, the legal order is perfectly flexible. But the cost of indeterminacy is very high. It is impossible, under either rule, to attain the optimum.

There is a way out of this. The root of the problem is that to ensure determinacy, we must choose a metalaw before we know the content of the laws that the courts will announce. This bears semblance to a familiar problem in law-and-economics, namely the choice between rules and standards.³⁸ All the metalaws that I have discussed so far are, in a strict sense, metarules: it is possible to tell exactly what they mean before they are applied. It is also possible to define the metalaw as a metastandard. This means formulating the metalaw vaguely, so that some indication of its content is given at the time of promulgation but its precise meaning only becomes apparent at the time of application. The benefit of a metastandard over a metarule is that it allows a balance to be struck between certainty and flexibility.

That there is a trade-off between the two implies, further, that the elimination of indeterminacy which is complete under a chronological metarule is only partial under the corresponding metastandard. Suppose that the lawmaker announces a metastandard such as 'courts are usually bound by earlier rulings'. This is a chronological metastandard: it expresses the idea that the first judgment in time binds subsequent courts, but the use of the word 'usually' makes it vague. It is a presumption in favour of the chronological metarule which can be rebutted in 'unusual' circumstances. The threshold for rebuttal is linguistically ambiguous. Its application depends on whether a particular case is 'usual' or not. Whether this condition has been fulfilled can only be decided once the circumstances of that case are known. *Ex ante*, we do not know if facts that trigger a particular outcome now will trigger it again in the future. We only know that they will

substantive content of the law is entirely invariant to the order in which cases come to trial – that is, a completely non-arbitrary system – then we should institute a system of precedent based on either the union or the intersection metalaw.

³⁷ I use the term in the legal realist sense: see generally Kennedy (n 12).

³⁸ This is the point made in Kaplow (n 1). That work concerns laws rather than metalaws. The point is this. If a legislator has to decide what behaviour should trigger liability for negligence, he has to examine every possible situation in which somebody's actions may cause harm to another, and then decide whether it is desirable to impose a sanction in each individual case. Since that information is costly, it transpires that it is better to simply say that 'unreasonable' actions will trigger sanctions, with the meaning of 'unreasonable' to be determined as individual cases come before the courts. Take the example from n 12. It is possible, instead of having the 'reasonableness' rule, to pass a statute which specifies, inter alia, whether administering muscle relaxant before electroshock therapy triggers liability or not. The problem is that the investigation at the stage of passing a statute would be very expensive, and the facts in question may never arise, or they may arise so infrequently that the indeterminacy causes no real harm to society, so that the expenditure ends up being wasted. The analogy with metalaws is this: it would also be very expensive to try and predict the order in which cases will come to the court and the explanations that the courts would give for reaching particular outcomes. It is better to set a vague metalaw which gives some guidance to the judges but which is nonetheless flexible when the requirement arises.

trigger it 'usually'. The law might change. *Ex post*, we do not know if facts that triggered an outcome in the past will trigger it again in the future. The law may have changed.³⁹

The latter point requires some elaboration. Suppose that at T1 the courts decide *R v A*, so that 'immoral behaviour' becomes law. At T2, we form the expectation that all immoral behaviour is murder and that no behaviour is murder if it is not immoral. At T3, the courts decide *R v B*, so that 'intentional killing' too becomes law. The two overlap in what should by now be a familiar pattern. Absent a metalaw, there is hierarchic indeterminacy. The T2 prediction is compromised. Consider the case where C is on trial for telling tall tales about Z's wife which cause Z to die without C intending to cause his death. The prosecution contends that *R v A* means that he is guilty of immoral behaviour. Counsel for C demurs that the prosecution must show intent. The controversy turns on whether *R v A* is still a peremptory proposition of law. The prosecution contends that *R v B* did not overrule *R v A*, counsel for the defendant argues that *R v A* can only be valid if it is consistent with *R v B*. This in turn points to the word 'usual' in the metastandard. If *R v A* and *R v B* are both 'usual' cases, then *R v B* cannot have overruled *R v A*. If *R v B* was unusual, it may have overruled *R v A*. Since the term 'usual' is linguistically ambiguous, we cannot know with certainty whether it is *R v A* or *R v B* that governs in *R v C*. No prediction about the outcome of *R v C* can be true with a probability of one. Even though there is a metalaw in place, it is too vague to ensure complete hierarchic certainty.

III. Common Law Metastandards: Two Examples

The moment may be opportune to substitute the absurd laws from the hypotheticals with real ones that are applied in litigation. I will begin by quoting the content of some real precedential metalaws as they are found in the United Kingdom, America, and Canada. For the Supreme Court of the United Kingdom, the relevant doctrinal statement is:

[Their Lordships treat] former decisions of this House as normally binding [and depart from them] where it appears right to do so⁴⁰

In Canada, the principle was most recently formulated thus:

'In making [the] decision [whether to overrule a previous judgment], the Supreme Court engages in a balancing exercise between the two important values of correctness and certainty.'⁴¹

³⁹ To relate this back to the discussion of Hart (n 22), the point that I make here, once aligned with this terminology, is that the (secondary) rule of change must have a fairly wide penumbra. A rule of change such as "earlier cases *always* trump later cases" has a very narrow penumbra – there can only be indeterminacy as regards the meaning of the word "case", of course supposing that no two cases can ever be decided at the exact same point in time. A rule of change such as "earlier cases *usually* trump later cases" has a much narrower core, since it is possible to conceive of a great many cases whose "usualness" is indeterminate. In my terms, the probability with which we may predict how a case decreases as we shift from "always" to "usually": the two formulations are, I think, identical (see further n 28).

⁴⁰ *Practice Statement* [1966] 3 All ER 77

⁴¹ *Canada v Craig*, 2012 SCC 43, [2012] 2 SCR 489 at [27]

The United States Supreme Court has a different doctrine:

[Whether precedent] shall be followed or departed from is a question entirely within the discretion of the court.⁴²

Now, it is I think self-evident that all three metalaws are vague. Under the nomenclature that I adopted earlier, they are metastandards. Their precise meaning can only be determined at the time of application. It is impossible to tell, without knowledge of the circumstances of particular cases, whether it is 'right' to depart from precedent, or whether the court will exercise its 'discretion' to do so, or what the right balance between correctness and certainty is.⁴³

Let me now turn to the slightly subtler point that I made before about partial indeterminacy under a metastandard. I will give two examples from English contract law. England is particularly instructive, since the metastandard that I just cited was preceded, between 1899 and 1966, by a metarule.⁴⁴

In *Dunlop Pneumatic Tyre v New Garage & Motor*⁴⁵, the facts were that Dew and Selfridge made a contract which provided, among other things, that Selfridge would not sell tyres below their recommended retail price. That clause had been inserted into the contract on the insistence of Dunlop, who were the manufacturers of the tyres. Selfridge did sell below the recommended retail price, and Dunlop sued for damages. The outcome was that Selfridge did not have to pay damages. The explanation that Viscount Haldane gave was that 'only a person who is party to a contract can sue on it'.⁴⁶

In *Smith and Snipes Hall Farm v River Douglas Catchment Board*⁴⁷, the facts were that the owner of a farm made a contract with the River Douglas Catchment Board for securing the banks of the river. She then sold her farm to Smith and Snipes. The Catchment Board's work had been defective, and a flood caused damage to the farm. Smith and Snipes sued for breach. The outcome was that the Catchment Board was held liable for damages. The

⁴² *Burnett v Coronado Oil & Gas Company* 285 US 393 (1932) 405

⁴³ It may be contended that the rule-standard distinction is only workable in a relative sense: all words are vague, some merely less so than others. This is implicit in Kaplow (n 1), and explicit in the refinement proposed in Korobkin (n 2) 29-30. This objection can be met by contrasting the metalaws given here with more specific ones which are used by lower courts and which have been used in the past. For example, the House of Lords used to operate a chronological metarule:

A decision of this House once given upon a point of law is conclusive upon this House afterwards, and... it is impossible to raise the question again... and the House be asked to reverse its own decision... [A] decision of this House upon a question of law is conclusive, and... nothing but an Act of Parliament can set right that which is alleged to be wrong in a judgment of this House. (*London Tramways v London County Council* [1898] AC 375, 379-81)

This permits for no exception, whereby the *Practice Statement* (n 40) does and is for this reason left deliberately vague.

⁴⁴ *London Tramways* *ibid*

⁴⁵ [1915] AC 847

⁴⁶ *ibid* 852

⁴⁷ [1949] 2 KB 500

explanation given by Lord Denning was that the claimants had a 'sufficient interest to entitle [them] to enforce [the contract]'.⁴⁸

Without a metalaw, *Smith* and *Dunlop* are hierarchically indeterminate. The *Dunlop* holding dictates that only a party to a contract can sue on it, and the *Smith* one that only a party with an interest in a contract can enforce it. It is unclear what happens when someone is a party to a contract but has no interest in enforcing it, and it is also unclear what happens when someone is not a party to a contract but does have an interest in enforcing it. Note that there is no indeterminacy at the intersection between the two: if someone is a party to a contract and has an enforceable interest, then he is entitled to sue under either interpretation. The situation is thus analogous to the hypothetical that I discussed earlier.

How can the indeterminacy be eliminated? The four metarules that I proposed can also govern here. It is possible to have a union metarule, in which both parties to contracts and those with a special interest can sue. It is also possible to have an intersection metarule, whereby a claim can only succeed if the claimant is a party to a contract who is vested with a special interest in enforcing it. It is also possible to have a chronological metarule, under which those who are parties to contracts can sue but those with a bare special interest cannot. And it is possible to have a reverse chronological metarule, under which only those with an enforceable interest can sue.

Consider, now, the judgment of the House of Lords in *Beswick v Beswick*⁴⁹. There, the hierarchical indeterminacy between *Dunlop* and *Smith* came to the fore. If *Dunlop* governed, the claimant would win. If *Smith* governed, she would lose. It was held that under the then-applicable doctrine of strict precedent, that is, the chronological metarule, *Dunlop* prevailed over *Smith*. Only parties to contracts could sue.⁵⁰ This was so because *Dunlop* predated *Smith*, and under the chronological metarule it was not possible for a later judgment to overturn a more recent one. Note, further, that their Lordships lamented the lack of flexibility that the doctrine afforded them. They were in broad agreement that the privity rule was harsh, but felt themselves bound to follow the earlier ruling. Supposing that their normative argument about privity was at the time correct, then it must be that under the metarule, a socially undesirable law was retained in order to ensure determinacy. The trade-off between flexibility and certainty was struck firmly in favour of the latter.

I now turn to another pair of cases. The second was decided in this century and was therefore governed by the metastandard. In *Robinson v Harman*⁵¹, the facts were that Harman promised Robinson to deliver a lease to a house in Croydon. Harman then decided not to go through with the transaction. Robinson sued for damages. The outcome was that he received £200. The explanation given by Baron Parke was that 'where a party

⁴⁸ *Ibid* 514

⁴⁹ [1968] AC 58

⁵⁰ The law has since changed: see Contracts (Rights of Third Parties) Act 1999

⁵¹ (1848) 1 Ex Rep 850

sustains a loss for reason of a breach of contract, he is entitled, so far as money can do it, to be placed in the same situation, with respect to damages, as if the contract had been performed'.⁵² This is universally referred to as the 'expectation interest'⁵³.

In *Attorney General v Blake*⁵⁴, the facts were that Blake was employed by MI-6. His contract contained an undertaking that he would not disclose any information acquired in the course of his employment. Blake turned out to be a double agent. He fled to Moscow. Some years later, he wrote a book about his time with the British intelligence services. That book was published in England. The Crown sued for breach of contract. The outcome was that he was ordered to hand over the proceeds from the publication to his former employers. The explanation was that 'a party to a contract may have an interest in performance which is not readily measurable in terms of money'.⁵⁵ In the voluminous body of literature that has followed this judgment, this is often called the 'performance interest'⁵⁶.

Without a metalaw, *Blake* and *Robinson* are hierarchically indeterminate. This concerns those cases where the promisee has had his performance interest infringed but not his expectancy interest, and also cases of expectancy loss without performance loss. It is possible to solve the indeterminacy, as before, by holding that the legal system protects both the expectancy and the performance interest, that it protects the two only when they coincide, that it protects only expectancy, or that it protects only the performance interest.

Under a chronological metarule, the problem would be solved by simply considering the expectancy interest paramount. But in England, precedent is now governed by a metastandard: it could be that *Blake* overruled *Robinson*. Whether it did depends on whether we now believe that it was 'right to do so' at the time.⁵⁷ That question cannot be

⁵² Ibid 855

⁵³ The term originates from Fuller, L. & Perdue, W., 'The Reliance Interest in Contract Damages' (1936) 46 Yale LJ 52.

⁵⁴ [2001] AC 268

⁵⁵ Ibid 282

⁵⁶ See Friedmann, D. 'The Performance Interest in Contract Damages' (1995) 111 LQR 628.

⁵⁷ This last passage may have left the reader puzzled. If the judges in *Blake* did not explicitly say that they were overruling *Robinson*, how could it be that judges in cases after *Blake* are in doubt as to whether *Robinson* remains good law? Or, in the more abstract terms that I used when initially sketching out the argument, if the judge in *R v B* does not say that he is overruling *R v A*, how can it be that the judge in *R v C* is unsure whether it is *R v B* or *R v A* that binds him. If the metastandard implies a presumption in favour of the chronological rule, how come that presumption is sometimes deemed rebutted even if in the postcedent case no attempt was made to rebut it? The easy, and facile, answer is that this type of confusion is exceedingly common in all common law systems. This might imply an equally easy solution. If the judges in cases after *Blake* were to apply the metastandard more rigorously, there would be no hierarchic indeterminacy: *Robinson* would always be applied. Yet I do not think that the English judiciary are inadequate or that they do not know the applicable metastandard. There is a subtler explanation. I restrict it to a footnote because I have discussed it elsewhere and because to engage in a full re-examination of the issue would detract too much from the original purpose of this paper. In an individual case, the judge's task is to apply a general statement to specific facts. This forces him to translate the language of the law into the language of the facts.⁵⁷ This may involve a number of interpretative steps. For example, if the law says that 'immoral' behaviour is prohibited and the facts that X wrote an erotic poem about the crucifixion of Christ, the judge may say that 'immoral' means 'offending religious sentiment' and then that 'erotic scenes are offensive' and then finally that 'an erotic poem about religion is offensive and therefore immoral'. In the

answered with any degree of precision. There is thus some probability that *Robinson* remains good law and also some probability that *Blake* overruled it. In some cases, it is said that expectancy remains the rule⁵⁸. In others, the performance interest is applied.⁵⁹ The only matter on which there seems to be a consensus is that the law is uncertain.⁶⁰

IV. Statute

I have so far sought to convince the reader that hierarchic indeterminacy is a necessary result of the adoption of a precedential metastandard. It can be eliminated through a metarule, but this entails a tremendous loss of flexibility. Since extreme rigidity is sub-optimal, a partially indeterminate metastandard is superior. This point concerns judge-made law. Presently, I want to examine the position under statute. I will begin by defining statute. A body of law is statutory if its constituent laws are self-contained and generated independently of the process of adjudication. The word self-contained here stands for two related ideas. Firstly, I assume that all statements in a statute constitute laws. Secondly, I assume that there are no binding laws other than those in the statute.⁶¹

discharge of the single adjudication, all that matters is that these connections are logically or at least intuitively coherent. The problem is that in a precedential system, the individual steps that the judge takes are explanations of the outcome, and can thus potentially constitute laws in the future. For example, we may say that in translating 'immoral' to 'offending religious sentiment', the judge created a law which says that 'offending religious sentiment' is illegal. (I base this on *Whitehouse v Lemon* [1979] 2 WLR 281) Now, the question is what happens if some facts offend religious sentiment but are not immoral? This depends on whether 'immoral' is general and 'offending religious sentiment' is specific, in which case no moral act can trigger liability, or whether 'offending religious sentiment' is general and 'immoral' specific, when no act which offends religious sentiment can remain unpunished. But in the individual case, the judge may very well speak of these steps as being interchangeable, since his task is merely to translate them to the language of the facts. The question for the next judge is to decide whether the previous judge was merely 'translating' or actively 'reordering' the law. To this end, he must refer to the metastandard, which yields indeterminacy.

⁵⁸ *One Step v Morris-Garner* [2014] EWHC 2213; *Giedo van der Garde v Force India Formula One Team* [2010] EWHC at 436; *AB v CD* [*The Sine Nomine*] [2002] 1 Lloyd's Rep 805

⁵⁹ *Vercoe v Rutland Fund Management* [2010] EWHC 424; *Experience Hendrix v PPX Enterprises* [2003] EWCA Civ 323. I should note that in these two cases the existence of a performance interest seems to have been affirmed tentatively, but it was found to overlap with expectancy. A case in which only a performance interest can support the outcome is *Esso Petroleum v Niad* [2001] EWHC 458 (Ch).

⁶⁰ To undertake a thorough examination of the many arguments that have been cited for and against these cases would require a very lengthy literature review. I do not think this would be very helpful here. I only restrict myself to saying that the rule in *Blake* is among the most ambiguous in the English law of contract. I of course do not expect the reader to ascribe much weight to my personal views. See for example *The Sine Nomine* (n 58), *Blake* (n 54) 292ff. The leading textbooks are also at a loss to explain the current legal position: see Hugh Beale (ed), *Chitty on Contracts* (32nd edn 2015, Sweet & Maxwell) and Charles Mitchell et al, *Goff & Jones: The Law of Restitution* (7th edn 2002, Sweet & Maxwell) at para 20-031. That view is regularly ventilated around the leading British legal periodicals: see Campbell, D., 'The Treatment of *Teacher v Calder* in *AG v Blake*' (2002) 65 MLR 256; Campbell, D. & Devenney, J., 'Damages at the Borders of Legal Reasoning' (2006) 65 Cambridge LJ 208; Buxton, R., 'How the Common Law Gets Made' (2009) 125 LQR 60, 73-78; Adhar, R., 'Contract Doctrine, Predictability, and the Nebulous Exception' (2014) 73 Cambridge LJ 39, 47-50 and 53ff.

⁶¹ The latter assumption is patently unrealistic. For the sake of simplicity, I want to focus here on the position where a single statutory document contains all of the laws that can be applied to a dispute. My reasoning is thus directed at codifications like the *Code Civile* and the *Bürgerliches Gesetzbuch*. The position is somewhat different when the relevant dispositions are located in different statutes. Although I suspect that the analytical scheme that I develop here is transposable to that situation, I do not discuss it at any considerable length here

Hierarchic indeterminacy may arise under statute in the same way as it does under precedent. Suppose there is a criminal code and in it we find the following provision:

Section 1. A person commits the offence of murder if he kills another intentionally.

Section 2. A person commits the offence of murder if he kills another while acting immorally.

Without a metalaw⁶², the two provisions are hierarchically indeterminate – we do not know whether to secure a conviction, the prosecution has to make out either intent or immorality or whether it should prove both intent and immorality. Still, the position differs from that under precedent in one material respect. Since every statement in a statute is a binding law, no interpretation can be valid if it treats one of the statutory laws as a nullity. In the example that I just gave, it cannot be that no immoral act will trigger imprisonment or that no intentional killing is illegal.

It was seen in the discussion of precedent that all metarules eliminate *ex post* hierarchic indeterminacy. The same is true here. Under the union metalaw, both immoral behaviour and intentional killing trigger imprisonment. Under the intersection metarule, only behaviour which is immoral and which also constitutes intentional killing triggers a sanction.⁶³ What of *ex ante* indeterminacy? The assumption that there are no laws other than those contained in the statute is controlling. Before the statute is passed, there are no laws. And since there cannot be a sanction without a law, no set of facts exists that can trigger a sanction. Therefore, the legal system is *ex ante* determinate even in the absence of metalaws.

To recapitulate, under statute there is no *ex ante* indeterminacy and two metarules eliminate hierarchical indeterminacy *ex post*. There thus appears to be no reason to use metastandards. Why is this so? Under precedent, the content of laws is not known in

– see note 63 *infra*. There is also the possibility that some body of law is dispersed between statutes and court judgments. I do not discuss that possibility because the purpose of my analysis is the compare statute to precedent. I do not however dispute that in practice one often complements the other.

⁶² The legally-trained will immediately object against the example, since in real criminal codes there are metalaws. One possibility is that the criminal law will have the *in dubio pro reo* metalaw – there being an ambiguity, the prosecution has to prove both intent and immorality. Another possibility is that there is a union metalaw – Sections 1 and 2 are, absent an indication to the contrary, assumed to define separate crimes, say “immoral action murder” and “intentional killing murder”. The point that I am making here, however, is that without *any* metalaw, the system is hierarchically indeterminate. There might also be some disbelief at the supposition that the legislature would be careless enough to draft statutes in this fashion. My argument here touches precisely on that. While the legislature can easily introduce a metalaw and tailor it to its desires. The courts, as we saw, face considerable difficulties in achieving this.

⁶³ I do not discuss here the chronological and the reverse chronological metarule because they are inapplicable to a single code of the type I discuss here (see n 61), whose provisions would presumably have been passed at a discrete point in time. It is possible to conceive of a situation in which one Act defines murder as immoral action and another as immoral killing, and then we have to determine which, if any, has precedence. In such a case, both the chronological and the reverse chronological metarule eradicate hierarchical indeterminacy entirely, as do the union and the intersection. In practice, the reverse chronological is virtually always adopted. In states where it is impossible to elevate something to a constitutional status, there might be room for a metastandard – see for example *R v Factortame* [1990] UKHL 7.

advance. It becomes desirable to occasionally specify their hierarchy *ex post*. Whether thus specifying it is desirable, however, cannot be known before the cases in question are decided and the corresponding laws announced. Conversely, under statute the content of the constituent laws is known at the time at which the statute is drafted.⁶⁴ There is no reason to disambiguate them in advance. It is always possible to make a body of statutory law determinate. Under precedent, some residual indeterminacy is inevitable. Under statute, it can be eliminated entirely if the lawmaker so wishes.

It might be useful, at this juncture, to contrast the judgment in *Blake* with a similar provision from the German civil code. Recall that *Blake* concerns situations in which the claimant asks to recover the defendant's profit. There is tension between disgorgement and the rule in *Robinson v Harman*, which dictates that the claimant can only ask to be returned to the position he would have been in had the contract been performed. The *Bürgerliches Gesetzbuch* contains similar provisions:

Article 249(1). (1) A person who is liable in damages must restore the position that would exist if the circumstance obliging him to pay damages had not occurred.

Article 285(1). (1) If the obligor, as a result of the circumstance by reason of which, under section 275 (1) to (3), he has no duty of performance, obtains reimbursement or a claim to reimbursement for the object owed, the obligee may demand return of what has been received in reimbursement or an assignment of the claim to reimbursement.

Article 275. (1) A claim for performance is excluded to the extent that performance is impossible for the obligor or for any other person.

(2) The obligor may refuse performance to the extent that performance requires expense and effort which, taking into account the subject matter of the obligation and the requirements of good faith, is grossly disproportionate to the interest in performance of the obligee. When it is determined what efforts may reasonably be required of the obligor, it must also be taken into account whether he is responsible for the obstacle to performance.

(3) In addition, the obligor may refuse performance if he is to render the performance in person and, when the obstacle to the performance of the obligor is weighed against the interest of the obligee in performance, performance cannot be reasonably required of the obligor.

⁶⁴ This proposition holds even if we abandon the assumption of self-containment. If there is already a statute which defines murder as immoral behaviour and the legislature is contemplating a new one which defines it as intentional killing, the legislature is able to solve the hierarchical indeterminacy – it may abolish the old statute entirely, it may say that the two establish distinct offences, or it may say that both intent and immorality are now sanctionability conditions. The courts generally cannot do so with the same degree of certainty – whether they can overrule a previous case generally depends on whether the circumstances are usual, whether they are apt for the exercise of discretion, and so on.

Article 249(1) is cognate to *Robinson v Harman*, in that it defines a remedy for breach of contract.⁶⁵ Articles 285 and 275 are analogous to *Blake*.⁶⁶ The phrase 'if...' in Article 285 is, in this instance, the metarule. It makes it clear that the application of Article 285 is conditional on the conditions in Article 275 being satisfied. Indeterminacy at English law stems from the fact that a person who has suffered damage to his performance interest but not to his expectancy does not know if she can recover. The likelihood of recovery depends on the likelihood that *Blake* changed *Robinson*, which in turn depends on the interpretation of the word 'normally' in the metastandard. In Germany, the same person would instead determine whether she can recover by reference to the much more specific conditions in Article 275.

It may be thought a point of difficulty that the German statute is not itself perfectly determinate. In a difficult case, there may ostensibly be disagreement as to whether the facts are to be subsumed under the expectancy measure or under Article 285, which permits disgorgement. It can be difficult to tell if performance is impossible, or grossly disproportionate, or unreasonable, or if the obligation concerns 'an object'.⁶⁷ Strictly, the point concerns linguistic rather than hierarchic ambiguity. The comparative question, thus put, is whether the conditions in Article 275 are linguistically clearer than the English word 'normally'. I think it is self-evident that the German rule is, in certainty terms, superior. Why so? The word 'normally' originates from a metastandard which is used to manage the hierarchy between all common law rules, from contract to criminal law. The German rule was designed to address, specifically, the tension between performance and expectancy in the law of contract damages. Since it is tailored, it is clearer and easier to apply.

Another, potentially clearer, rendition of the same idea is this: could the courts in England, deciding under a metastandard, produce the same certainty as the compilers of the German code? One potential method of doing this would be through the postcedent. The English judiciary could have explained the outcome in *Blake* by reference to the same conditions as those used in Article 285(1). This would not, however, make English law as determinate as German law. It would still be hard to tell whether *Blake* overruled

⁶⁵ Note, however, that at German law damages are not the default remedy: specific performance is. Article 283 establishes expectancy as one alternative and Article 285(1) as another. The two can be claimed cumulatively, subject to the rule against double recovery: Article 285(2).

⁶⁶ It would lead to the same result. In *Blake* (n 54), the defendant's obligation was negative: he had a duty not to circulate information to the general public. Once he breached, performance became impossible: no-one in the world could erase the book from its readers' minds. This fulfils the condition set out in Art 275(1). *Blake*'s actions had been prompted by the promise of reimbursement from his publishers, Cape. The Crown sought to recover it, which it would be permitted to do under Article 285(1). See further Siems, M., 'Disgorgement of Profits for Breach of Contract: A Comparative Analysis' (2003) 7 *Edinburgh LR* 27.

⁶⁷ Presumably, in a case such as *Blake*, the German courts would have much difficulty with that particular aspect of the dispute. We may say that *Blake*'s obligation was one of forbearance, in which case Article 285(1) does not apply. We may also say that the *Blake*'s obligation was to safeguard state secrets, which can potentially be an object, though evidently not in the material sense. Thus the facts of *Blake* would lie in the penumbra of Article 285. That is a point of applicative, rather than hierarchic, uncertainty.

Robinson v Harman. The other option would be to use the precedent. In *Robinson v Harman*, Baron Parke could have qualified the expectancy principle with the Article 275(1) conditions. But under a metastandard, there would have been no guarantee that the law would not change in a future, unusual case.

V. Precedent versus Statute

My argument up to this point can be summarized as follows: metarules produce hierarchic determinacy and metastandards hierarchic indeterminacy. All other things being equal, metarules usually go with statute and metastandards with precedent. It follows that, all other things being equal, statute is more hierarchically determinate than precedent. Does this mean that statute is efficient and precedent inefficient? Not necessarily. It is inevitable that other things will not, in the real world, be equal. Firstly, statutory metarules are an option that is available to the legislator, and just that. She might not exercise it.⁶⁸ Secondly, legislators are theoretically more vulnerable to capture than the judiciary⁶⁹. Moreover, their access to information may be inferior relative to the decentralized courts.⁷⁰ Consequently, even if statutory law is more hierarchically determinate, its substantive rules might be systematically inferior as a matter of efficiency or, for that matter, fairness. Hierarchic determinacy aside, precedent may have advantages over statute.

For these reasons, I cannot realistically claim that the argument in the preceding pages, if correct, translates seamlessly into an 'efficiency of statute'⁷¹ hypothesis. However, I think there is a somewhat subtler, yet safer, inference to be drawn. I will try now to show now that as the number of laws within a given body of law increases, so do the benefits of metarules over metastandards. Consequently, the advantages of precedent over statute diminish as the legal system grows in sophistication. If there are few legal dispositions or, to use Professor Kaplow's terminology, the law is 'simple', then precedent is better. As the number of laws grows, or as the legal system grows more 'complex',

⁶⁸ That does not have to be irrational. One possibility is that the political cost of defining the law precisely is high even if the informational cost of achieving that is low. It is also possible that the legislator is undecided as to what content she wishes to give to the law. The third, and most interesting possibility, is that indeterminacy may in fact be desirable: see Ayres & Talley (n 4) and Johnston (n 4). The idea is developed in the context of rules and standards in Friedman & Wickelgren (n 2) cf Kaplow, L. & Shavell, S., 'Do Liability Rules Facilitate Bargaining? A Reply to Ayres and Talley' (1995) 105 Yale LJ 221.

⁶⁹ The concept of capture is associated with George J Stigler, 'The Theory of Economic Regulation' (1971) 1 Bell J Economics 3. For the argument that courts are less vulnerable to capture than legislature, see Crew, M. & Twight, C., 'On the Efficiency of Law: A Public Choice Perspective' (1990) 66 PC 1

⁷⁰ Leoni, B., *Freedom and the Law* (1961 Nash Pub)

⁷¹ That is, a refutation of the 'efficiency of the common law hypothesis'. The latter term is sometimes used to denote the theoretical models which attempt to show that precedent produces more efficient laws than statute (see the sources cited at n 7). For examples of the use of the term, see Parisi, F., 'The Efficiency of the Common Law Hypothesis' in Rowley, C. & Schneider, F. (eds), *The Encyclopaedia of Public Choice* (2004 Springer) and Zywicki, T. & Stringham, E., 'Common Law and Economic Efficiency' in Parisi, F. & Posner, R. (eds.), *Encyclopedia of Law and Economics* (2010 Elgar).

hierarchic indeterminacy increases.⁷² If complexity keeps on increasing, there comes a point at which it becomes desirable to switch from precedent to statute, that is, to codify. If this is correct, then in a static sense, precedent is preferable for 'simple' bodies of law and statute for 'complex' ones.

I propose to focus, first, on the relationship between the number of laws and hierarchic indeterminacy under precedent. Suppose that, at T0, a metastandard is set which postulates that 'previous cases are binding 80% of the time'. At T1, *R v A* is decided so that immoral behaviour is declared to found liability for murder. At this point, there is only one possible interpretation of the law: only immoral behaviour triggers liability for murder, and behaviour which is not immoral never triggers liability for murder. At T2, *R v B* is decided and it is said that intentional killing can also trigger liability for murder. If the facts point to immoral behaviour which is not intentional killing, there is an 80% probability that there will be a finding of liability. If there is an intentional killing which is not immoral, there is a 20% probability that the defendant will be found liable. Now, suppose that at T3, *R v C* is decided so that reckless behaviour also becomes a potential ground of liability. There are now three hierarchically indeterminate laws, which give six sets of facts whose outcome is indeterminate. These are:

- (1) An immoral, intentional killing which is not reckless
- (2) An act which is immoral and reckless but is not an intentional killing
- (3) An intentional killing which is reckless but is not immoral
- (4) An immoral act which is neither an intentional killing nor reckless
- (5) An intentional killing which is neither immoral nor reckless
- (6) A reckless act which is neither immoral nor an intentional killing

Under the metastandard, there is an 80% probability that all immoral acts are sanctionable and all acts that are not immoral are non-sanctionable. In other words, there is an 80% probability that (1), (2) and (4) trigger a sanction and (3), (5), and (6) do not. There is also a 20% probability that immorality is not the only sanctionability condition, and some other combination of laws governs. Within this residue, it might be that in all six cases the defendant is liable, or it may be that he is only liable in (1), or only in (2), or in (1) and (2) but not the rest, or in (1) and (3) and not the rest, and so on. There are 62 combinations in total. Since no metalaw governs the residue, it would be reasonable to suppose that each combination is equally likely to be applied. We may then say that at T3,

⁷² It might be desirable to expand on the analogy with Kaplow (n 1). His analysis proceeds from the assumption that any standard can be replicated by a rule. For example, the statement 'persons must keep their promises' is a standard. It can be replicated, in theory, by a rule which states that 'if a person makes an offer, that offer is accepted, there is consideration and an intention to create legal relations, duress and fraud are absent, no *force majeure* in the period between acceptance and performance, and then that person does not deliver the promised performance, then she is liable for damages, or in exceptional cases she must perform her obligation'. This type of rule is what Professor Kaplow would call a 'complex' one. In standard juridical discourse, it is usually broken down into a number of laws, such as the doctrine of consideration, the rule in *Taylor v Caldwell* [1863] EWHC QB J1, the rule in *Robinson v Harman* (1848) 1 Ex Rep 850, and so on. The difference is to the present ends entirely semantic.

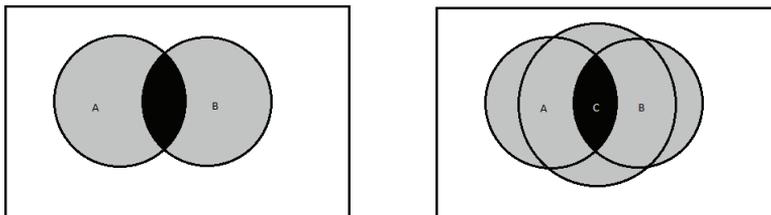
the combination (1), (2) and (4) triggers liability with a probability of 80% and every other combination triggers liability with a probability of 0.32%.

It is not possible, yet, to show that indeterminacy increases between T2 and T3. At both times, it is possible to calculate the probability that any one combination will govern. For example, it may be said at T3 that if 10,000 cases are decided, 8,000 will consider (1), (2), and (4) to found liability and 32 will penalise (3), (4) and (6). But it is worth bearing in mind that real-life metastandards are not expressed in numerical terms. Instead, some vague expression is used, such as ‘old cases will be followed *usually*’.⁷³ This puts the law beyond estimation. Let us again compare T2 and T3. At T2, some law will govern ‘usually’ and some other law will govern ‘unusually’. At T3, some law governs ‘usually’, but one of sixty-two laws govern ‘unusually’.⁷⁴ Predicting what happens in the ‘unusual’ hypothesis becomes more difficult with every additional law.

The foregoing, I hope, captures the disadvantages of precedent. I said earlier that the literature suggests that precedent also has advantages over statute. What might those advantages be? Regulating a certain area of human activity through statute requires an investigation into the circumstances in which that activity is undesirable. This involves the acquisition of information, which is costly. Conducting the investigation *ex ante* in order to write the statute entails a sunk cost. It is inevitable that some of the investment will be wasted. Under precedent, the same investigation is spread over time. The need to acquire information is limited to patterns of activity which occur in reality: fanciful or banal occurrences are never, or seldom, litigated. Thus, if the lawmaker has no prior information about a given activity, precedent seems preferable. But its advantage decreases over time. As the stock of information that the courts accumulate increases, the amount of information that they can acquire in the future decreases.⁷⁵ At the same time, the probability that a new law will be produced is positive in every instance of litigation. As I argued earlier, hierarchic indeterminacy increases with the accumulation of new

⁷³ This should not be read as an argument for switching to ‘numerical’ stare decisis rules. If the metastandard stipulates that the courts must depart from precedent in two out of every ten cases, then in order to fulfil the requirement some judges will have to change the law even if they do not believe that doing so is necessary.

⁷⁴ The following diagram illustrates the change from T2 to T3:



The diagram on the left shows the position with two laws, the diagram on the right the position with three laws. The addition of a new set increases the grey-shaded area, which represents indeterminacy. With two laws, the areas that are indeterminate are the relative complement of A in B and the relative complement of B in A. With three laws, the indeterminate areas are the relative complements of A in B and C, B in A and C, C in B and A, A and B in C, A and C in B, and B and C in A.

⁷⁵ A similar point is made in Ehrlich & Posner (n 217).

laws. That indeterminacy can only be eradicated completely under a metarule, and a metarule is only viable under statute. Therefore, there will come a point at which statute will become preferable to precedent. This does not mean acquiring the information anew: simply codifying the precedential laws would be sufficient.

How does this fit into the example that I used throughout the paper? Suppose that, at T₀, the legislator decides that he wishes to prohibit certain types of killing. To draft a statute, she must conduct a series of investigations into the various circumstances in which someone might be killed. That investigation is likely to entail quite a lot of waste. For example, Members of Parliament would have to direct their minds to the possibility that at some point someone will tease their brother and that the teasing will take the form of speculation about that brother's wife's moral probity and that this will cause the brother to have a heart attack which will in turn prove fatal. If these events never transpire, then the time invested into conducting the inquiry is wasted. The waste can be avoided by leaving the law of murder to the courts. Only events that do in fact occur will come to be litigated. And only when the events do come to be litigated will it be necessary to decide on, and explain, the most desirable outcomes. Suppose that between T₁ and T₃ it becomes apparent from the cases that the desirable liability criteria are immoral behaviour, recklessness, and intentional killing. So much is known at T₃. But this body of law is hierarchically indeterminate under the metastandard. It can be interpreted in sixty-three ways. It becomes desirable, at this juncture, to switch to a statutory scheme in which the information that has been accumulated in the course of litigation is incorporated into a statute.⁷⁶

VI. International Law

So far, I have restricted myself to a discussion of precedent and statute. The analysis was driven by the metarule-metastandard dichotomy. I think that the usefulness of that dichotomy extends to other fields of academic and hopefully practical interest. In this last section, I will develop one such extension. It concerns certain problems of international private and public law. If I am right, some perceived deficiencies of the international legal

⁷⁶ It is not difficult to think of real-world examples. The Emperor Justinian, having codified the laws of Rome, banned the writing of commentaries – see generally Jolowicz, H., *Historical Introduction to the Study of Roman Law* (1972 CUP). This was presumably a very early attempt to forestall the growth of hierarchic indeterminacy. Likewise, the adoption of the *Bürgerliches Gesetzbuch* was preceded by a lengthy, and famous, debate as to whether the time was ripe for codification. We may conceptualise this as a discussion of whether sufficient information had been generated from case law to warrant codification. To give two somewhat more recent examples, in the United States, a common law jurisdiction, the Restatements serve to distil judge-made law into something somewhat less hierarchically indeterminate. Being non-binding, they do not accurately correspond to what I call here statute. But their structure, and in some instances their authority, no doubt does. In England, company law – traditionally judge-made – has now been codified into the Companies Act 2006. In a short theoretical essay, it would be futile to attempt to analyse these examples in depth. I only wish to note down that under juridico-economic orthodoxy – see generally n 7 – all codification is viewed with caution. If what I have just said is right, then there is at the very least a case for arguing that many if not most codifications are efficient. In each instance, the critical question would be whether the gain in hierarchic determinacy exceeded the information-cost diseconomy. The answer to that question turns on the individual circumstances of each codification. But I do not think the automatic presumption against codification remains sustainable.

order might not be deficiencies at all, but merely information cost economies realized through the adoption of a metastandard.

Hierarchic indeterminacy often arises when the laws of two states are potentially applicable to the same situation. Suppose that Z, sitting in his house in England, telephones his brother C in France and tells him that he has been sleeping with his wife. As before, the call is a prank. C suffers a heart attack and dies. Z is now on trial in England. A (wholly hypothetical) French law provides that immoral action founds liability for murder. At English law, only intentional killing is unlawful. The prosecutor argues that Z's death occurred in France and C should therefore be imprisoned. Counsel for Z responds that C uttered the words in question in England, and at English law C has committed no crime. The question, for the court, is whether to apply the English law or the French law. Absent a conflict-of-laws metalaw,⁷⁷ there is hierarchic indeterminacy: either outcome is as likely as the other.

Now, it is possible, in this situation, to adopt metarules of a similar kind to the ones that I discussed under the rubric of precedent and statute. We may say that only English law applies (a domestic-law metarule), that only French law applies (a foreign-law metarule), or that both apply cumulatively (a union metarule), or that a provision only applies if it is contained in the laws of both countries (an intersection metarule). C is not liable under the domestic and the intersection rule. He would certainly be liable under the foreign and the union metarules. Either metalaw renders the system determinate. As in the discussion of precedent, the simplicity here is deceptive, since a metarule has to be chosen before the matter actually comes to be litigated. But choosing it is in fact difficult, since the putative metalaw-setter will sometimes want French law to apply and sometimes he will prefer English law. And again, one potential solution is to adopt a metastandard, such as 'French law will apply usually'. By creating such a presumption, the lawmaker ensures that forecasts can be made about the outcomes of particular disputes. But by keeping it vague, he also economizes on information costs. And this economy reintroduces a degree of indeterminacy into the system.⁷⁸

It might be desirable at this juncture to consider a real-world example. Within the European Union, conflict-of-laws metalaws for contracts are contained in the Rome I Regulation.⁷⁹ That regulation contains a very complex metalaw for determining the legal regime which is applicable to a contract. I will summarize the provisions of the Regulation very briefly here. In the first place, parties are free to choose a governing law in the

⁷⁷ It should be noted that the hypothetical poses a problem of domestic conflict-of-laws provisions rather than international law. It is nonetheless common for such provisions to be discussed under the label 'international private law' – see, for example, Fawcett, J., Carruthers, J., & North, P., *Private International Law* (14th edn, OUP 2008). Historically, each European state had its own, domestic conflict-of-laws rules. Since the growth of cross-border commerce would be seriously impeded by legal diversity in this area, such national rules are nowadays heavily influenced by international-law instruments, one of which I discuss below.

⁷⁸ By this I do not mean to say that the balance should be struck in this particular way, especially in criminal matters where there are obvious, good reasons to write laws as precisely as it is possible.

⁷⁹ Regulation (EC) No 593/2008 on the Law Applicable to Contractual Obligations ['Rome I']

contract.⁸⁰ If they do not make a choice, then all turns on the type of contract that they entered into. For example, a contract for the sale of goods is governed by the law of the seller's habitual residence. A contract for land is governed by the law of the place where the land is situated, and so on and so forth. There is also a fallback provision. If a contract does not fit into any of the categories mentioned in the Regulation, or if it falls within more than one category, then the law of the habitual residence of the characteristic performer applies.⁸¹ There is, however, an important qualification: the metalaw in question does not apply if the outcome it would produce would be manifestly incompatible with the public policy of the country in which litigation takes place.⁸² It goes without saying that 'public policy' is a very vague criterion, which turns the complex metarule into a complex metastandard: there is simply a presumption that Article 3 and 4 will apply which can, in unspecified cases, be rebutted.

On first impression, this appears to be unsatisfactory. The law is insufficiently precise. It can be very difficult to anticipate whether a law that originates from one country will be deemed acceptable in another. It is possible, however, to find a valid rationale for the use of a metastandard here. Recall that there is a trade-off between the cost of information and the benefits of determinacy. If the makers of Rome I had attempted to produce an unambiguous metarule, they would have had to put their minds to every conceivable instance in which the application of foreign laws in each member state courts would be undesirable. And since the laws of no foreign state are set in stone, this would necessarily have to include laws that might be passed in the future. Therefore, each and every signatory would have had to consider the desirability of every possible foreign law being applied in their domestic courts. The acquisition of all the relevant information would be extremely costly. The public policy metastandard strikes a balance between the cost of that information, on the one hand, and the need for predictability on the other. It does so by giving an indication of the likely applicable law through the Regulation. But some determinacy is sacrificed in order to ensure flexibility, hence the public policy exception. Relative to the metarule, the metastandard is slightly less determinate, but much cheaper to produce.

What I have done thus far is merely to repackage a familiar problem within a new framework: the public order exception has been a staple of the international conflict of laws regime since pre-Industrial times.⁸³ I want to conclude the exposition by demonstrating a potentially useful implication of the reasoning developed here to a live issue, namely the *kompetenz-kompetenz* problem in the European Union. I believe it can be usefully conceptualized as an issue of hierarchic indeterminacy, though it differs slightly from the ones I discussed earlier. In my discussion of the common law of contract and the *Bürgerliches Gesetzbuch*, I focused on the laws of one jurisdiction. In that context, it is usually possible to identify a sovereign with authority to issue laws and metalaws. In

⁸⁰ Rome I Article 3

⁸¹ Rome I Article 4

⁸² Rome I Article 21

⁸³ See *Somerset v Stewart* (1772) 98 ER 499.

international law, and especially in European law, there is no such sovereign. What is lacking is a meta-metalaw, that is, a law which confers on someone the power to write metalaws.⁸⁴

I will begin with a quick summary of the *kompetenz-kompetenz* problem. The European Court of Justice has held that where the provisions of European law clash with those of a national constitution, the national constitution must yield.⁸⁵ The German Constitutional Court, among others, is of the view that it has competence to review any act of the European Union for compliance with the German *Grundgesetz*.⁸⁶ Since both courts claim to be competent to determine their own competence, and they both interpret that competence broadly, there is an obvious hierarchical overlap. There is presently no meta-metalaw which would govern in the event of a clash: we simply do not know what would happen if some Treaty or instrument is found to contravene the *Grundgesetz*.⁸⁷ An answer is wholly beyond me. But I think the analysis developed here may indicate a possible form, if not a substance, for the solution.

It is possible to conceive of two simple metarules. Either competence is assigned to the ECJ to the complete exclusion of national courts, or competence is assigned to the national courts to the complete exclusion of the ECJ. Either meta-metarule would eliminate hierarchical indeterminacy in its entirety: under ECJ primacy, there would simply be no question of measuring the validity of a Union instrument against the provisions of a national constitution. And under national court primacy, it would be impossible for an unconstitutional EU law to become binding domestically.

Let us for now suppose that the choice of meta-metalaw is limited to these two options. This allows us to consider the type of information that a putative lawmaker would need in order choose between the two meta-metarules. There is in fact a close parallel between his position and that of a lawmaker choosing between precedential metarules. A choice has to be made between laws, but the content of those laws is not known. Consider, first,

⁸⁴ Taken to its terminal point, this reasoning mirrors that in Hart (n 22), that international law lacks the rule of recognition which municipal law has: *ibid* 234. The *Kompetenz-Kompetenz* problem, however, is slightly more subtle: the European Union is a *sui generis* international organisation, many of whose laws are, as far as application is concerned, equivalent to municipal law. (*Van Gend en Loos v Neederlandse Administratie der Belastingen* (1963) Case 26/62) The problem of measuring their validity against municipal constitution mirrors not Hart's discussion of international law, but rather that of a split over the 'ultimate criteria' to be used in the identifying the law: *ibid* 122. Hart discusses *Harris v Danges* [1952] 1 TLR 1245, in which the South African legislature created courts that would overrule the established South African judiciary on questions of constitutional validity. The two courts went on to invalidate each other's judgments. The problem there was that there was no metalaw stipulating which could would prevail in such a clash, and indeed no-one could probably write one. *Kompetenz-Kompetenz* is similar in many respects.

⁸⁵ *Internationale Handelsgesellschaft mbH v Einfuhr- und Vorratsstelle fur Getreide und Futtermittel* (1970) Case 11/70

⁸⁶ See Judgment of 30 June 2009 - Case 2 BvE 2/08 ('The Lisbon Judgment')

⁸⁷ As in the discussion of contract damages, I simplify a great deal. Exhaustive summaries of *Kompetenz-Kompetenz* can be found in, among others, Thym, D., 'In the Name of Sovereign Statehood: A Critical Introduction to the Lisbon Judgment of the German Constitutional Court' (2009) 46 CMLR 1795 and in Beck, G., 'The Lisbon Judgment of the German Constitutional Court, the Primacy of EU Law and the Problem of *Kompetenz-Kompetenz*: A Conflict between Right and Wrong in Which There is No Praetor' (2011) 17 ELJ 470.

ECJ primacy. The ECJ considers the current EU Treaty to be the highest law. That Treaty may of course be amended. It is possible that some amendments will be considered repugnant by some Member States.⁸⁸ In order to produce a meta-metarule, the lawmaker would therefore have to consider all of the possible provisions that may, in the future, be incorporated into the Treaties. Clearly, describing and analysing each would be extremely costly. Moreover, some of the expenditure is likely to be wasted. For instance, the lawmaker would have to consider the possibility that the Treaties will be amended so as to abolish national police forces and introduce a pan-European police agency. The possibility of such a measure ever being adopted is in fact relatively slight. Supposing that it would never be passed, the time and effort taken to analyse the possibility at the time of drafting the metarule are wasted. The example, in isolation, might seem trivial. But if we take into account the totality of possible Treaty provisions that would need to be considered, it becomes evident that a meta-metarule would be very costly in information terms.

The position is not much different under a meta-metarule that affords primacy to national courts. National courts treat national constitutions as the ultimate benchmark of legal validity. National constitutions can, for the most part, be amended. Some constitutional amendments are potentially repugnant to the functioning of the Union. In designing the meta-metarule, the lawmaker would have to consider the possibility of such amendments being passed. As with ECJ primacy, much of that effort would be wasteful. For instance, it would be necessary to consider the possibility of some member state prohibiting foreigners from depositing money in its banks. Since such an amendment is highly unlikely to ever be passed in any one Member State, it is likely that investigating the possibility before the fact will turn out to be wasteful. And since this waste would be replicated over a great many implausible constitutional amendments, the aggregate cost of designing the meta-metarule is likely to be very high.

What of a meta-metastandard? One may take the form a presumption in favour of ECJ primacy, subject to a broad caveat. And it is also possible to presume that national constitutions are supreme in most, but not all, cases. I do not propose here to discuss the relative merits of one presumption vis-à-vis the other. Instead, I should like to discuss the benefits of a meta-metastandard in general, irrespective of its content. If a metastandard is chosen, it is possible to give the citizens of the Union an indication of the likely outcome of a clash between a national constitution and the Treaties. This is an improvement, in determinacy terms, on a situation in which constitutions and Treaties are equally likely to be treated as supreme in any one instance of adjudication. At the same time, under a meta-metastandard the cost of investigating the desirability of particular provisions is postponed to the time of their adoption. The need to study fanciful possibilities, such as a pan-European police force or a national ban on foreign deposits, is averted. As in the

⁸⁸ The German Constitutional Court listed a few in para 249 of the *The Lisbon Judgment* (n 86). These include the adoption of rules on citizenship, the creation of a European police force, the setting of taxation, imprisonment without due process, interfering with national languages, and the imposition of restrictions on freedom of speech, association, and religion. The court was keen to underscore the non-exhaustive character of the list.

example of precedent, the validity of particular laws would only be scrutinized if and when scrutiny becomes necessary.

Now, there is no legal meta-metastandard at present. Nor is there a meta-metarule. No one can produce it. If a Treaty is amended to include a meta-metalaw, national courts would disregard it. And if it is included in a national constitution, the ECJ would treat it as an irrelevance. As a matter of theory, it may be possible to achieve some uniformity by introducing the same meta-metalaw in all twenty-eight constitutions and the Treaties. But even then, *kompetenz-kompetenz* is bound to resurface once the ECJ and national courts reassert their autonomy over its interpretation.

It is possible, however, to say that there is a *de facto*⁸⁹ meta-metalaw, that is, a metanorm, in place. Despite asserting its primacy, the German Constitutional Court is yet to declare any European measure incompatible with the Treaties.⁹⁰ It would thus seem that, from that court's perspective, EU law ordinarily prevails. If this is right, then it can also be said that the metanorm is a metastandard. In the Lisbon Judgment, the German Constitutional Courts held that Treaty provisions are valid as a matter of German law so long as they do not intrude on areas of 'democratic formative action'.⁹¹ This is clearly on an open-ended criterion. It permits the court to assert its own primacy in an exceptional case. EU law is normally afforded primacy, thus giving the system a degree of determinacy. At the same time, the up-front cost of considering all possible future Treaty provisions is avoided. The determination of each measure's constitutionality is postponed until such time as that measure is actually adopted. The *de facto* regime strikes a balance between determinacy on the one hand and the need for flexibility on the other. Given the non-negligible information costs of achieving complete determinacy, I think there is at the very least an argument in favour of the status quo.⁹²

VII. Conclusion

The time is opportune to conclude. I began from precedent and statute. Under precedent, certainty and flexibility push in opposite directions. This makes it inevitable that a metastandard will be favoured over a metarule. Consequently, the hierarchy of judge-made laws is always partly uncertain. Statute is different. Statutory metalaws are written

⁸⁹ It is worth noting in passing that the master metalaw of any legal order must always be *de facto* rather than *de jure*, so far as it is impossible to explain why laws have the character of law by references to those laws themselves. It cannot be said that the US Constitution derives its authority from its own provisions: rather, it is the empirical fact that it is treated as the ultimate source of legal validity in the jurisdiction that it governs which prompts us to identify it as a master metalaw. These brief remarks do not, of course, exhaust the problem, but I think they suffice to illustrate the idea that *de facto* metanorms are inevitable.

⁹⁰ See for example *Re Wunsche Handelsgesellschaft* [1987] 3 CMLR 225

⁹¹ *The Lisbon Judgment* (n 86) at para 249 cf *Solange II* [1987] 3 CMLR 225.

⁹² To translate this solution to the language of Hart, *The Concept of Law* (n 22), my argument here is that the secondary rule which tells officials whether to apply secondary rules derived from municipal or EU law should have a wide penumbra. This proposition mirrors to no small extent Hart's argument in the postscript to *The Concept of Law*, to the effect that the rule of recognition and the rules recognised by reference to it ought to have a wide penumbra of uncertainty. There, he points that while the elimination of uncertainty is desirable, it clashes with other goals: *ibid* 251-2. What I have done here is identify one such goal – economising on the cost of information – and to show how the balance might be struck.

at the same time as substantive laws, it is possible to tailor the metalaw to the specifics of the area being regulated, that is, it is possible to have metarules.

I then discussed the implications of this point for the overall efficiency of precedent and statute. Many law-and-economics scholars are of the view that information is cheaper to courts than it is to the legislature. If that view is correct, then under precedent the cost of information is lower but the cost of hierarchic uncertainty higher. Under statute, the law is more hierarchically certain but information is costlier. Those costs being context-sensitive, it is impossible to say in the abstract whether statute or precedent is efficient. But two other points emerge. Firstly, there is no reason to suppose, as it is sometimes done in the literature, that precedent is always better than statute. Secondly, it appears reasonable to suppose that a new sphere of activity will be governed by precedent at first. As the courts accumulate more and more information, however, there will be will come a point at which codification becomes desirable.

The metastandard-metarule dichotomy can also be transposed to two problems of international law. The first is public order in the conflict of laws. Public order exceptions convert choice-of law metarules into choice-of-law metastandards. This need not be inefficient, insofar as the alternative would be to specify choice-of-law rules for every possible contingency. The point extends to *kompetenz-kompetenz*: selecting an ultimate arbiter of constitutional validity in the European Union would require a large up-front investment in information, some of which is inevitably going to be wasteful. There is a good case for postponing determinations of constitutional validity to such time as they become necessary – better a diamond with a flaw than a pebble without.

Chapter VIII

INFORMATION, PRECEDENT, AND STATUTE

In law-and-economics, it is fashionable to say that the common law is efficient.¹ One oft-intoned explanation, unmistakably Austrian in its provenance, is that the decentralised courts are informationally superior to the centralised legislature.² Modern authors afford that view near-axiomatic deference.³ Yet in economics and in law a lot has changed since the time of Hayek, so much so that I suspect a re-examination might prove profitable.

That re-examination takes here the following form: I assume that to the lawmaker information comes at a cost, and also that this cost differs systematically depending on whether the lawmaker is a judge or a parliamentarian.⁴ The comparison between the judiciary and the legislature thus turns on the relative cost of information. I move to distinguish between three meanings of the term information, and then to compare information costs under each definition as between the two lawmaking technologies under observation.

Let me now set out the main arguments in brief. First, information can mean knowledge dispersed among members of society. The courts siphon this kind of knowledge cheaply - the public must supply it to the judiciary whenever they want to have their disputes resolved. The legislature has no equivalent *quid pro quo* to offer. Accordingly, precedent comes out superior.

The foregoing concerns the transmission of existing information. But sometimes it is necessary for new information to be produced purely for the purpose of making a law. Since no individual can capture the whole benefit of there being a norm applicable to all, information in this second sense is, absent some additional incentive, liable to be

¹ Landes, W. & Posner, R., 'The Independent Judiciary in an Interest-Group Perspective' (1975) 18 JLE 875; Priest, G., 'The Common Law Process and the Selection of Efficient Legal Rules' (1977) 6 JLS 65; Rubin, P., 'Why is the Common Law Efficient?' (1977) 6 JLS 51; Posner, R., 'What Do Judges and Justice Maximise? (The Same Thing Everyone Else Does)' 3 SCER 1; Gennaioli, N. & Shleifer, F., 'The Evolution of Common Law' (2007) 115 JPE 43; Miceli, T., 'Selective Litigation, Judicial Bias, and Precedent' (2008) 38 JLS 157; Ponzetto, G. & Fernandez, P., 'Case Law versus Statute Law: An Evolutionary Comparison' (2008) 37 JLS 379.

² The point seems to originate from Menger, C., 'The 'Organic' Origin of Law and the Exact Understanding Thereof' in Nock, F. (tr), *Investigations into the Method of the Social Sciences with Special Reference to Economics* (1963 NYUP) or, in its more crystallised form, from Hayek, F., *Law, Legislation, and Liberty: Rules and Order* (1978 Routledge) 72-91. In the Austrian literature, it has been developed at length in, among others, Schwarzstein, L., 'An Austrian Economic View of Legal Process' (1994) 5 OSJL 1049; Hasnas, J., 'Hayek, the Common Law, and Fluid Drive' (2005) 1 NYUJLL 79; Ratnapala, S., 'Eighteenth Century Evolutionary Theory and Its Relevance in the Age of Legislation' (2001) 12 CPE 51.

³ See for example Kaplow, L., 'Rules versus Standards: an Economic Analysis' (1992) 42 Duke LJ 557, 611ff; Ehrlich, I. & Posner, R., 'An Economic Analysis of Legal Rulemaking' (1974) 3 JLS 257, 266; Cooter, R., 'Decentralised Law for a Complex Economy: The Structural Approach to Adjudicating the New Law Merchant' (1996) 144 UPLR 1644.

⁴ Throughout this text, I will use the term 'lawmaker' to denote a person vested with authority to produce law, that is, as a neutral term denoting either a judge or a parliamentarian.

underproduced. And since only the legislature possesses the institutional and budgetary facilities to initiate its production, statute has an advantage.

The term information can, in my model, also refer to a law's purpose. The comparative question, framed along this line, is not how to incent the public to produce or transmit information. It is how to ensure that the members of the lawmaking body can converge upon a unitary purpose. Under precedent, lawmaking authority is diffused across time and actors in a manner which hinders coordination. The centralised legislature, conversely, is more effective.

This being a very basic model, I then move to introduce some refinements. Firstly, whenever precedent has an advantage, that advantage is categorical only if the frequency of litigation over a given issue corresponds to the urgency with which a norm is needed to govern it. Otherwise, even if the courts acquire information cheaply, they may be too slow.

Secondly, the legislature, being centralised, finds it easier to decide whether its existing stock of information is sufficient to make a law. This does not mean that the legislature is always superior, since if there are gaps those may often be more effectively plugged by the judiciary. But it does mean that the legislature is better-placed to allocate lawmaking competences between itself and the courts.

Thirdly, precedent and statute are in practice always combined. This allows the courts and the legislature to plug gaps into each other's knowledge. But this does not render the allocation of lawmaking competences irrelevant. Coordination comes at a cost, and that cost can only be avoided by assigning specific norm-production tasks to the most suitable norm production technology.

Lastly, I consider the impact of interest groups. They tend to be more informed than the general public. Consequently, their custom is more valuable – if they have a systematic tendency to prefer one institution to another, then that institution might be superior. However, I find that the courts and the legislature will be used simultaneously. If one group is dominant in the legislature, its competitors will challenge it before the courts. And if one of those competitors succeeds in obtaining his desired precedent, it will be challenged in the courts. The information that interest groups carry is thus in the long run split between the courts and the legislature.

Toward the end, I will discuss some practical applications of the analysis that I develop. I argue that proposals to curb litigation impede the production of norms through the courts. This opens the possibility that they are inefficient in the aggregate, even if they succeed in lowering the cost of litigation. I also examine the role of third parties in litigation. In that respect, I conclude that private parties, such as the authors of *amicus curiae* briefs, add little to the effectiveness of the system. State-appointed advisors, on the other hand, may lessen the cost of coordination between the branches of a mixed system. I then move to sunset clauses. They make the consequences of certain policies observable. For this reason, they can potentially lower the cost of information across the system.

However, this is subject to two caveats: the cost of error in setting the experimental policy must not be too high, and the affected parties must be unable to coordinate and doctor the consequences to suit their own policy preferences. Lastly, I re-examine the general argument about the efficiency of the common law in the light of my findings. I argue that, if cost-effectiveness is taken as the starting point, the civilians in fact have a slight advantage.

The remainder of this text is structured as follows: Part I develops a basic model. Part II some refinements, and Part III discusses its applications. Part IV concludes.

I. The Basic Model

1. Definitions

I think it is prudent to define the core terms of the inquiry first. I begin with norms. A norm is a sanctionability condition, that is, a provision that under such-and-such conditions the state will deploy such-and-such powers of coercion against such-and-such individuals.⁵ This includes most statements which in lay parlance are associated with having the character of law, such as ‘those who commit murder will be imprisoned’ or ‘if someone negligently causes damage to another, he has to pay compensation’.⁶

I conceptualise norm production as a process in which an input, information, is converted into an output, norms, by the use of some technology, either precedent and statute. The analogy between the production of norms and the production of tangible goods may on first impression appear fanciful. Yet I think it stands to scrutiny.⁷ How so? It is fair to assume that when a lawmaker promulgates a norm, he does so with some objective in mind. His actions are instrumental rather than arbitrary or reflexive.⁸ More formally, the lawmaker acts to bring about a certain state of the world which differs from the state of the world that would obtain without there being a norm. If this is true, then it must also be true that the lawmaker acts upon mental representations of the current and potential state of the world. Those mental representations are themselves based on information that the lawmaker possesses. We may thus say that norm production is the process in

⁵ This definition is in line with positivist jurisprudence, and in particular the works of Kelsen. (see further Green, M., ‘Hans Kelsen and the Logic of Legal Systems’ (2003) 54 *Alabama LR* 365, 377ff). In essence, I equate a norm to a Kelsenian sanctionability condition.

⁶ The definition does not, however, include metanorms such as ‘the constitution always trumps ordinary statutes’. Although these too have the character of law, they describe the conditions under which ordinary norms are valid. But they do not in themselves contain sanctionability conditions. The same is true of procedural norms, which merely specify the internal rules of the institution, but do not in themselves direct the government to deploy any coercive action. Likewise, the definition excludes social norms, such as ‘those who shout in church shall be expelled’. Even though there is an obvious reference to a sanction here, that sanction does not emanate from the state.

⁷ I am bound to add here that the treatment of law as an economic good is not in any way novel: see for example Kaplow (fn 3) or, more on the point, Cowen, T., ‘Law as a Public Good: The Economics of Anarchy’ (1992) 8 *E&P* 249.

⁸ Note that I do not say here that the purpose must be good: a norm may be introduced purely to repress some minority that the lawmaker dislikes, or to suppress freedom of speech, or to ensure that a lawmaker remains in power in perpetuity. Even random norms may be caught provided that their arbitrariness is part of a purposeful policy being pursued by the lawmaker, say one of instilling fear into the general population.

which information is acquired and processed into norms. Courts and legislatures are structurally very different, and for this reason they acquire information in structurally different ways. Precedent and statute are accordingly rival information-acquisition technologies.

This definition now in place, I will briefly digress. I do so in order to highlight a significant methodological difference between the instant composition and the 'efficiency of law' literature.⁹ That literature studies the allocative properties of promulgated norms. This essay concerns the cost of the process which precedes their promulgation. Consequently, everything that I say here is completely agnostic on the allocative, distributive, or ethical properties of judge- and legislature-made law. If I say, for example, that the legislature acquires information about torts at a lower cost, this does not mean that the tort law that the legislature will make *from* that information will be efficient or fair or in any way 'good'.¹⁰ All that concerns me here is whether it is easier, or 'cheaper', for the information to be collected by judges or by legislators. In technical terms, my object is to rank precedent and statute by cost-effectiveness rather than by output efficiency.¹¹

I now return to definitions. What is meant here by information? I am obviously interested not in information *tout court*, but only in information that is useful in the production of norms. To produce a norm, the lawmaker needs to know what the current state of the world is, what alternative states of the world he can bring about, and what he wants the state of the world to be.¹² For brevity, I will refer to these categories of information as brute facts, contingent facts, and purposes.

I think it is best to blooden this taxonomy by illustration. Suppose that there is a polity in which driving speed is unregulated. The lawmaker there is considering the introduction of a 50 km/h speed limit in cities.¹³ At the commencement of the norm production

⁹ I mean works such as those cited at fn 1.

¹⁰ If one wishes to render the analysis here commensurate to the 'efficiency of law' literature, one may say that I assume that there are no technology-dependent differences in the amount of information acquired and the properties of the produced norm. Or one may say, more simply, that I assume that given the same information, a judge and a parliamentarian will produce the same norm. This is unrealistic since it presupposes that judges and parliamentarians do not differ systematically in competence, application, and probity. This is of course unverifiable.

¹¹ Obviously, both criteria are germane to the overall efficiency of law comparison. Suppose that a first-best rule can be produced by precedent and statute can do no better than the second-best rule. The savings from reduced transaction costs under the first-best rule are £1,000 across society. We may thus say that precedent is output efficient, since everyone is better-off with a saving than without one. Now suppose that producing any rule on the point under precedent costs £2,000 and only £500 under statute. That statute is more cost-effective here means that it is also more efficient overall, because the saving of £1,500 in production costs exceeds the £1,000 loss in output efficiency. This is of course a very stylised example. A well-known and more detailed elaboration on this theme may be found in Tullock, G., 'Two Kinds of Legal Efficiency' (1980) 8 Hofstra LR 659.

¹² A similar point is made in passing in Boulding, K., 'The Economics of Knowledge and the Knowledge of Economics' (1966) 56 AmER 1,7.

¹³ I use this example throughout the paper. I have chosen it precisely because it is unrealistic: in reality, speed limits are normally set by some administrative agency which is neither a court nor legislature. I have made this choice because I believe an unrealistic example to be more helpful, in that it prevents certain intuitions from the real-world from intruding into the very abstract points that I make here. To quell the reader's disbelief, I will

exercise, this putative lawmaker is wholly ignorant of anything that may have to do with cars - if fabular effect is desired, the reader is invited to suppose him an extra-terrestrial, a caveman and such like.

What steps would this benighted lawmaker have toward his objective? He would, first of all, need to familiarise himself with certain elements of material reality¹⁴, for example that vehicles exist, that those vehicles can move at speeds of up to 350 km/h, that the higher the speed of a vehicle the quicker it will reach its destination, that the higher the speed at which a vehicle collides with another object the more likely the destruction of both vehicle and object, and so on and so forth. These elements of reality I call 'brute facts'.

Second, the lawmaker would need to discover the consequences of a 50 km/h speed limit. For example, it is conceivable that drivers would take a longer time to reach their destinations, that accidents would become less frequent, and that an investment would have to be made into enforcement technology. Since these propositions would be immaterial but for the norm, I call them 'contingent facts'.¹⁵

Third, there is nothing in what I have said thus far to say that a world with fewer accidents is preferable to a world with fewer delays, or vice versa. In cost-benefit terms, our putative lawmaker cannot discharge his functions adequately if he is only given descriptions of reality. He also needs to decide how to weigh one side of the equation against the other. To do so, the lawmaker must be guided by some ought-statement, such as 'safety should be paramount' or 'convenience comes first'.¹⁶ I call these ought-statements purposes.

I define information as the sum of facts, both brute and contingent, and purposes. What I propose to do now is to compare the cost of acquiring each type of information for courts and legislatures. To salvage a modicum of tractability, I will initially develop a simplified version of the analysis. In particular, I will assume that the time at which a norm is promulgated is irrelevant, that there is no uncertainty over its consequences, that no party has any long-term interest in the content of the law, and that precedent and statute are mutually exclusive categories. All of these assumptions are of course unrealistic, and I will relax them once the fundamentals are in place.

throughout this text make occasional references to real-world laws that are in fact produced by courts or legislatures.

¹⁴ For a discussion of whether it is truly possible to name objects in reality, see Tye, M., 'Vague Objects' (1990) 99 *Mind* 535. I assume for the present purposes that there is perfect correspondence between labels and objects, since to do otherwise would be to complicate the analysis greatly for no commensurate gain.

¹⁵ The reader will probably note that this nomenclature is sometimes used in philosophy and logic. It will also not be lost on him that my usage and the philosophical one do not overlap entirely. What I mean by a contingent fact here is a fact which would not obtain if it were not for the existence of the norm: it is a fact contingent on the law. In this sense, it is close to the philosophical idea of an 'institutional fact' – see Maccormick, N., 'Norms, Institutions, and Institutional Facts' (1998) 17 *L&P* 301 for a conceptualisation of laws as a subset of institutional facts. More generally, see Ascombe, G., 'On Brute Facts' (1958) 18 *Analysis* 69.

¹⁶ More realistically, the lawmaker would want to strike a balance between two or more of his purposes. But in doing this he must necessarily weigh them: to say that speed is as important as convenience is as much of an ought statement as the ones in the main text.

2. Brute Facts

The cost of information, so long as facts are concerned, is the cost of assigning truth-values to propositions. Take the statement of brute fact 'some cars can reach speeds of 350 km/h'. It is either true or false. And its usefulness in norm production is conditional on the lawmaker's ability to determine its truth or falsity. Making that determination is costly - it is necessary to examine different makes of cars, to monitor recent developments in automotive technology, and so on and so forth. The costs of such activities are what I call information costs.

Brute facts, being elements of material reality, are observable. Isolated individuals have a very limited capacity for observation, so that society's stock of brute-fact information is thinly spread. Because lawmakers as a group are a very small subset of society, they possess only a minuscule fraction of the whole stock.¹⁷ To produce norms, they must acquire information from the public. The transmission of information from a member of the public to a lawmaker entails a positive cost to the former. We may therefore expect that it will not occur absent some inducement. The question thus put is whether courts and legislatures can offer such inducements, and which can do so at a lower cost.

The judiciary offers a valuable *quid pro quo* to the public in the form of dispute resolution. When a claim is lodged or a defence mounted before a court, it must be supported by assertions of brute fact. And in substantiating claims and defences, litigants must adduce evidence to persuade the judge of the facticity of the originating assertions. The parties' willingness to put forward such assertions and to incur the cost of their verification is directly attributable to the judiciary's ability to resolve disputes. Provided that the cost of verification is lower than the expected benefit of a favourable outcome¹⁸, a member of the public has a strong incentive to transmit dispute-relevant information to the courts. Conversely, the legislature's primary offering is norm production. Since we are presently assuming that no parties have a long-term interest in the content of the law, we may further assume that no parties will have an interest in transmitting their information to the legislature for free.¹⁹

Suppose that, in the imaginary polity which I described earlier, A had a house by a road. His children used to play outside until B, a deliveryman, began driving his van on the road very quickly and very frequently. A's children then had to be confined to the house. A, concerned for their welfare, moved to a house with a large garden. B was shortly

¹⁷ The same point was of course famously made in Hayek, F., 'The Use of Information in Society' (1945) 4 *AmER* 519. It should also be pointed out that there are many facts which are known to all lawmakers, such as that the Earth is not flat or that explosions caused damage or that water flows downwards. Since such facts are known to legislators and judges alike, they have no impact on the comparison between the two.

¹⁸ That benefit would be the probability of success multiplied by the sought award. It is important to note that I do not mean to say that all information will always be transmitted to the courts irrespective of the costs of its transmission: if the rules of procedure require a claimant to find 1,000 witnesses who can confirm his testimony, he might rationally choose not to testify in the first place. But very often it will make economic sense to prosecute a claim and to submit oneself to the rules of evidence. So much is surely evident from the incidence of litigation in the real world.

¹⁹ The assumption is relaxed in Section III.4.

thereafter made redundant and became an office clerk. A has now commenced proceedings against B, say in the tort of nuisance, to recoup the expenses of his relocation.²⁰

Both A and B hold brute-fact information which is relevant to the setting of the speed limit. A knows that cars are dangerous to children. B knows that he needed to use the roads in the course of his employment as a deliveryman. Accordingly, at trial, A is likely to submit that children cannot play around cars, and B is likely to respond that he needed to use the roads and to drive at such-and-such speed to do his job. The trial judge acquires information that is relevant to the speed limit as an incident of adjudication.

Imagine now that A and B direct their minds to the possibility of informing the legislature that cars are dangerous to children or that driving quickly is necessary to deliver parcels. Neither may be expected to care about the speed limit – A now has a house with a large garden and B an office job.²¹ A will not, by petitioning the legislature to regulate driving, recoup the money and time spent on moving houses. Nor will B, now an office clerk, gain or lose anything from the imposition of a polity-wide speed limit. Therefore, we would expect that the information that A and B hold would not reach the legislature.

If this were the end of the matter, we could simply say that the courts are superior and legislatures redundant. I think in actuality the judiciary's advantage, although real, is far less pronounced. Why so? The legislature can pay to secure the information that the courts receive gratis. In the speed limit hypothetical, there is nothing to prevent the legislature from commissioning someone to monitor traffic. This would no doubt lead them to observe that cars imperil children and that deliverymen use the road system and so on and so forth. If procuring information in this fashion were costless, the legislature would be equal to the courts. The cost of surveys, consultations, expert testimony, etc., is however in practice considerable, so that the courts are in reality more cost-effective.

The circumspect reader may well suspect some knavery here, for it appears that the mechanism that I describe is merely distributive. The objection runs thus: if under precedent parties pay for information and under statute the legislature does, then the sole difference between the two is that under precedent the cost of information is born by private individuals and under statute it is shared between all taxpayers. This may have fairness implications but not economic ones: who pays does not matter if the amount paid is the same. Does this bust my flush? I think not, for the counter-argument overlooks a critical feature of the problem. If the legislature pays for the information to produce a law, that law would still have to be applied in a court, and when it is applied in that court, private parties will *again* incur the cost of its transmission.²² If Parliaments pays an expert

²⁰ If the reader is familiar with the practicalities of tort litigation, I ask her to assume that causation is as described and that neither party disputes that.

²¹ We may say that they are rationally apathetic: for a discussion of the term in context, see Faure, M. & Weber, F., 'Dispersed Losses in Tort Law - an Economic Analysis' (2015) 6 JETL 163.

²² What of the argument that under precedent, the court receives the same information many times and under statute the legislature gathers it only once? I do not think that this leads to much. It is generally necessary to

to determine that cars are dangerous to children, then it sets the limit at 50 km/h, A would still have to go to court to sue B in nuisance, and in the course of the proceedings the same arguments will be made. Now, one may well say that since the information in question has already been collected and a law made, the retransmission of the information makes no difference to the cost-effectiveness analysis. But there is again a refutation, in that when the choice was made to make the law through the legislature, a saving was foregone in that the same information could have also been acquired in litigation. Put somewhat more neatly, the point here is that if the legislature makes laws, it needs courts to apply them. And if the courts can simultaneously apply laws and make them, then to limit them only to application would be to forego a potential saving – there is an opportunity cost to using statute.

If this is accepted²³, I propose to return to the main line of the argument – if parties give information to the courts for free and the legislature must pay for it, then the legislature is, without something else, worse. But note that since the courts lack the wherewithal to ‘buy’ information, when there is something else the legislature may well come out superior. Presently, I turn to explaining what that something may be.²⁴

know how often a certain thing happens in real-life in order to determine its relevance: if A’s children are the only children who are endangered by cars, it would make little sense to regulate speed limits all over the polity on that basis. Thus the repetition of similar claims signals to the courts how frequently a certain pattern of facts repeats itself in society. Likewise, if the legislature-appointed expert only observes one incident of cars endangering children, this would probably be an insufficient basis for legislative action. And there is nothing to say that if legislature-appointed experts observe 100 incidents, this is cheaper than the courts observing the same thing in 50 cases.

²³ If it is not, I have two more refutations to offer. I relate them here in brief since I believe the opportunity cost point to be both sufficient and more straightforward. Firstly, since we are concerned here with information that the parties themselves hold, it is surely cheaper for them to transmit it than to have someone else observe them and report it back to the government. A possible objection to this is that it is also cheaper for the parties to skew the information that they themselves have, so that more would have to be expended on verification – but on this point see fn 24 below. It would have to be shown that the legislature has better verification technology at its disposal, which I think is by no means certain. Secondly, it may also be said that generally the courts will be more cost-effective at discovering *germane* information, since the parties are likely to highlight the prescience of an issue to them. Conversely, the legislature may expend quite a lot of resources on discovering immaterial facts. For example, in the hypothetical I assumed that the government sends an expert to monitor vehicular speed. But if the government does not know that vehicular speed is potentially problematic, it may also send an expert simply to observe the roads. In conducting the research, the expert will also expend effort on gathering immaterial information, such as the colour of cars, their make, the average number of passengers in them and so on. We would not expect A and B to focus on the colour of B’s van in their dispute, so that a saving is made. More generally, we may say that since the courts are generally quite close to actual disputes in society and the legislature quite far-removed from them, the courts find it cheaper to transverse that distance.

²⁴ It might be desirable to also say what it is not. There is a lawyerly intuition to the effect that courts are better at detecting false or skewed information than the legislature. This is presumably so because the courts, owing to their adjudication function, operate under formal standards of proof so that assertions have to be substantiated in a certain fashion. The same is of course not true of legislatures, which are not bound to any particular standard of proof and whose procedures are generally more flexible. But does this mean that there is no standard of proof in the legislature? This would be correct if the legislature were bound to accept the truth of any assertion put to it. I am confident that if I were to write to the German legislature today informing it that the Earth is flat, my statement would not, be accepted without critical scrutiny. It would be more correct to say that the legislature adjusts its standard of proof depending on context. Can it then be shown that its standards of proof are ‘worse’ than those of the courts? This would only be true on the terms adopted here if the courts

3. Contingent Facts

The reader will recall that I introduced the term 'contingent fact' to denote the consequences of a particular norm - a statement of fact is a statement of contingent fact if it could not be true but for there being a norm. The truth-values of such statements, unlike those of brute facts, are not normally²⁵ ascertainable by empirical observation.²⁶ There are material differences between the verification of observables and the verification of predictions. And those differences sound in information costs. In the preceding section, those were the costs of transmitting observations from those who observe to those who govern. When it comes to predictions, the information in question

can be shown to make fewer errors (where error means both accepting a false statement and rejecting a true one) at a lower cost: that is, if they have more cost-effective verification technology. Is this in fact true? I think not. Firstly, the burdens of proof in litigation are designed to ensure that the judiciary can deliver its primary offering, which is adjudication. This necessitates a number of compromises: in civil justice, it is assumed that if something is true with a probability of 0.5, it is true with a probability of 1. In criminal justice, it is assumed that if something is true with a probability of less than 0.95, it is true with a probability of 0, that is that it is false. Secondly, certain methods of demonstrating the truth or falsity of a statement, such as hearsay, are expressly forbidden from being given any weight at all, even though they may of high probative value in practical terms. Thirdly, if parties for their own strategic reasons choose to treat something as true even if it is not, the court cannot generally investigate its truth or falsity. The legislature is not thus encumbered. This does not mean that it itself has a cost-effectiveness advantage when it comes to verification, for it may plausibly set its standards at too low a level, or it may decide to accept questionable evidence, and so on and so forth. The point that I am making, rather, is that there is no good reason to think that either norm-production technology is better or worse than the other in this respect – they are equal, in that it is equally possible to deceive a court and a legislative committee. In formal terms, I may say that I assume that the costs of verification to courts and to legislatures are equal. And if they are equal, they do not impact the comparison between the two as far as cost-effectiveness is concerned. Since the point is rather abstract, I will flesh it out in particular contexts: see n 30 and n 65..

²⁵ Some facts are contingent on a norm that already exists. For example, it is undeniable that in jurisdictions where the speed limit is in fact 50 km/h, many drivers drive at a speed which is close to the limit. This is a brute fact, its truth-value being empirically determinable. It is also a contingent fact, since but for the speed limit, many of those drivers would drive at a speed well in excess of 50 km/h. The two categories overlap. Where they do, the courts have an advantage. One-off parties will transmit information about their actions that they would not transmit to the legislature. Suppose that the speed limit is 50 km/h and A is suing B for damages over her relocation, and further that B is shown to have driven his van at 49 km/h around A's children. B's defence is likely to be that he needs to drive at that speed because it is optimal for his job. A's refutation is likely to be that 49 km/h, even if legal, was still too high a speed to maintain around children. These submissions effectively inform the courts that 49 km/h is a speed at which it is possible to conduct the business of deliveries, and also that it is a speed which some may see as too dangerous for children. As before, both facts are relevant to setting the speed limit. Here, they are transmitted to the courts because they are also relevant to the immediate dispute. A and B have no reason to transmit that information to the legislature: the speed limit in general does not concern them, and the legislature can neither force A to pay damages nor can it hold B blameless. The analysis is identical to that of brute facts which are not contingent.

²⁶ This does not put them beyond verification. It may be that the truth-value of such a statement can be established as a matter of logic from brute facts. For example, if we are told that 'X pollutes the river' and 'X never breaks the law' we may deduce that 'If polluting breaks the law, X would not pollute the river'. More realistically, we may assign probabilities to such statements being true. For simplicity, we may assume here that they are deemed to be entirely true once a certain probabilistic threshold has been reached. For example, when it is shown to a court that a certain thing is true with a probability of 0.51, the courts will proceed on the assumption that the actual probability is 1. (See further *In Re B (Children)* [2008] UKHL 35) Although this is not invariably true, it seems more realistic than the contrary assumption, namely that the courts engage seriously with probability and confirmation: for an analysis which has the benefit of having been produced by a sitting judge, see Hodgson, D., 'The Logic of the Law – A Response' (1995) 15 OJLS 51.

is at the commencement of norm production held by no-one. It has to be produced from scratch.²⁷

How does this shift impact my analysis? I trust I do not abuse the reader's credulity when I assume that the lawmaker is personally incapable of producing most information. The question is whether the public will produce it for him. In the ordinary run of events, no individual member of the public will be able to capture the full benefit of there being a norm applicable to all. One cannot patent a speed limit in the way one can patent a palliative for indigestion. We may then expect that, absent some inducement, contingent-fact information will be underproduced.²⁸ The comparison between the courts and the legislature then turns on their ability to offer suitable inducements to the public.

The courts will often fall short.²⁹ To explain why I think so, I return to the hypothetical. To produce a speed limit norm, the lawmaker might wish to know the number of accidents prevented by a 1 km/h reduction in average speed. For simplicity, let us assume that this ratio can be definitively³⁰ computed by running a computer simulation of road

²⁷ The distinction is similar to that between foreknowledge and discovery as drawn in Hirschleifer, J., 'The Private and Social Value of Information and the Reward to Inventive Activity' (1971) 61 *AmER* 561. I should note that there are some brute facts about which information has to be produced as well, such as those whose empirical observation is very expensive or difficult. For example, that the Earth is round is an element of material reality, but the production of that information took many centuries and was not complete until Magellan's expedition at least. For brute facts such as these, the analysis developed in this section is more appropriate than the one developed in the last. The two categories overlap in another way as well: see fn 25.

²⁸ This amounts to nothing more than the trite observation that information is, in many ways, akin to a public good. This point is made frequently in the general literature on information-production. See for example Arrow, K., 'Economic Welfare and the Allocation of Resources for Invention' in NBER, *The Rate and Direction of Inventive Activity: Economic and Social Factors* (1962 PUP) cf Demsetz, H., 'Information and Efficiency: Another Viewpoint' (1969) 12 *JLE* 1. For an analysis of the semblance between information and 'ordinary' public goods, see Head, J. & Shoup, C., 'Public Goods, Private Goods, and Ambiguous Goods' (1969) 79 *EJ* 567.

²⁹ A similar point is made in Shavell, S., 'Liability for Harm versus Regulation of Safety' (1984) 13 *JLS* 357, 359-60. There, Professor Shavell points out that regulators must acquire information about risky activities before they occur, whereas courts investigate such problems *ex post*. It is usually cheaper to observe the consequences of some risk materialising than it is to predict it. This line of reasoning is further developed in Rose-Ackerman, S., 'Dikes, Dams, and Vicious Hogs: Entitlement and Efficiency in Tort Law' (1989) 18 *JLS* 25. 46-50. There, Professor Rose-Ackerman advanced a tort rule under which those who face the risk of an accident are compensated for the cost of efficient and consequential loss, irrespective of whether precautions are taken, with damages adjusted for the likelihood of the accident and the precaution-related reduction in the amount of consequential damages. Evidently, the implementation of such a rule would require *ex ante* lawsuits. Professor Rose-Ackerman notes that, in such instances, the courts' ordinary informational advantage is lost – they are forced to consider hypotheticals. It is the need to address this which prompts her to consider a mix of regulation and liability. The *ex post-ex ante* distinction drawn by these authors is mirrored here, to some degree, in the distinction between brute and contingent facts.

³⁰ Does it make a difference if the software does not yield a definitive result, but rather a probabilistic one. That is, would there be any difference between the courts and the legislature if we could only say that the results are correct with a confidence of, say, 60%. This would only be true if there is any systematic difference between the ability of the courts and the legislature to ascertain the confidence which ought to be attributed to the prognosis correctly – see fn 24. I do not think there is such a difference – the legislature can be informed of the weaknesses of the prediction by experts that it retains. The courts can be informed of such weaknesses by experts retained by the parties to the dispute. There is no reason to suspect that the legislature's experts will be 'better' or 'worse' than those chosen by the parties, or vice versa – so the margin of error in determining the confidence that ought to be put into the prognosis remains roughly the same. Of course, it may so happen that in an individual case the parties fail to bring relevant testimony to the judge or that the legislature fails to consider relevant evidence

traffic whose production would cost £600,000. Consider now A and B's relocation case, with an added *donnée*: if A produces the software, he will win his case because the judiciary will announce a speed limit and say that B exceeded it. A would pay for that software only if the expected value of the claim exceeds £600,000.³¹ If his claim is worth less, he would be better-off dropping his suit.

Generalising from this, we may say that under precedent the production of information is contingent on the value of a claim.³² The norm-relevant information will remain underproduced whenever the social value of a norm exceeds the private value of a claim. Litigation being driven and paid for by litigants, the court cannot 'buy' the necessary information.³³ And because the judiciary cannot reward litigants for producing a socially valuable norm, the social value of the norm is excluded from litigants' decisional calculus.³⁴ This misalignment is peculiar to precedent. The legislature can decide freely what information to procure. If parliamentarians are deliberating the introduction of a speed limit and their deliberations turn on the number of accidents prevented by a 1 km/h reduction in average speed, they can vote to order the software. This avenue, moreover, remains open even if there is not a single member of society whose loss from there being no speed limit exceeds the software's cost. Statute offers the possibility of remedying underproduction; precedent does not.

Now, this advantage is not as pronounced as it might presently appear. Firstly, everything that I have said thus far is premised on the assumption that the information in question

– but so far as no systematic tendency of this type can be attributed to either institution, we may expect that any differences will in the long run even each other out.

³¹ The position would be the same if the software would favour B's defence rather than A's claim: his decision on whether to produce the software would depend on the value of the claim. If, for example, A is claiming £100,000 in compensation, then B would be better-off paying that amount instead of the £600,000 that a successful defence would cost. Would anything change if there is a fee-shifting rule such that the loser pays the costs of the winner? This is similar to the problem discussed in Luppi, B. & Parisi, F., 'Litigation and Legal Evolution: Does Procedure Matter' (2012) 152 PC 181. On first impression, both parties have an incentive to produce the software since in the event of success they will acquire the entire benefit while bearing none of the costs. But if A knows that B can shift the costs onto him, he can always make a favourable settlement offer, and the obverse is true if B knows that A can shift his costs. The software would always be produced only if the parties always have different perceptions of their probability of success once the software is produced.

³² The point is similar to that made by Professor Shavell in respect of the deterrent effect of tort claims: Shavell, S., 'The Social versus the Private Incentive to Bring Suit in a Costly Legal System' (1982) 11 JLS 333. An allusion to the possibility being discussed here is made at fn 21 *infra*.

³³ There are some instances in which litigation is not paid for by the litigants, and it is possible for the courts to impel its production: that would be the case, among others, in instances where the state is involved as a party to the proceedings – say in criminal and public law. The point made here is inapplicable to such instances, but only to the general case in which litigants bear the cost of information production.

³⁴ Is there a difference in this respect between adversarial and inquisitorial approaches to civil procedure? I think the answer is generally in the negative, because even if the court under an inquisitorial system can direct the parties to produce the software in question, it cannot force them to bear its cost – if the expenses of the court-appointed expert exceed £600,000, the case would still be dropped. However, it may be that an inquisitorial system commands a slight advantage because the court can at least direct the parties to produce the information when its cost does not exceed the value of the claim, whereas under an adversarial system this would still be left to their discretion. For a more detailed comparison between inquisitorial and adversarial systems, see Langbein, J., 'The German Advantage in Civil Procedure' (1985) 52 UCLR 823.

has no profitable deployment outside of norm production. This is not true always, or even often. The software may be commissioned by an insurer for the purpose of calculating premiums. Or it may be ordered by an automobile manufacturer who wishes to optimise the safety of her product. Once the software is produced, the problem becomes one of exchange rather than production. Its solution exactly mirrors that discussed in the brute fact hypothesis. Precedent comes out superior.³⁵

Secondly, there are also instances where contingent facts are or previously have been brute.³⁶ The hypothetical describes a situation where the lawmaker turns his attention to a hitherto unregulated activity. But in a mature system of law the more common problem is that he has to compare the effects of an existing norm to those of a contemplated one. If the lawmaker is considering increasing the speed limit from 50 km/h to 55 km/h, the contingent facts that pertain to the 50 km/h speed limit are empirically observable. Information only has to be produced in respect of the new speed limit. And very frequently, the contemplated norm is preterit. If, for example, 55 km/h was yesteryear's speed limit, there is, other things being equal, no need to produce information at all. The lawmaker need only compare the brute facts of yesteryear to the brute facts of today.

These secondary points are exceptions to rather than refutations of the underproduction point. There are good reasons to believe that the market itself underproduces information.³⁷ And not all norm production is reducible to a choice between old and new norms. There is a sizable residue of cases in which contingent-fact information has to be generated exclusively for norm production. In such instances, there is something of a paradox. In any norm production exercise, both brute- and contingent-fact information will be relevant. Precedent is cost-effective for the former but statute superior for the latter. Yet the norm must be produced by a single institution.³⁸ Which is preferable? I think the legislature, my reasoning being as follows: precedent has an advantage when it comes to exchange and statute has an advantage when it comes to production. But whereas exchange is possible under statute, production is impossible under precedent. Under statute, the acquisition of brute-fact information is merely cost-ineffective. Under precedent, there is not even the possibility of incenting parties to produce information. Consequently, statute offers at least the option of a remedy. It must be, therefore, that in this circumscribed set of cases the advantage of statute is absolute.

³⁵ Suppose that the automobile manufacturer is sued by C in the tort of negligence for designing an unsafe vehicle and causing him to be injured. The automobile manufacturer has a strong incentive to show that he used the software to compute the optimal speed of the vehicle, in which case the judiciary acquires the information for free.

³⁶ See further fn 25.

³⁷ See the authorities cited at fn 28.

³⁸ | abstract here from the dynamic aspect of norm production whereby a statute is produced and clarified by the courts or where a certain doctrine is developed by the courts and then amended by statute.

4. Purposes

Let us now move to purposes.³⁹ I said earlier that purposes are ought-propositions. Following Hume, we may say that they do not have truth-values.⁴⁰ The statement 'safety should trump convenience' is neither objectively true nor objectively false. We may further say that the acquisition of information about one's own purposes at a fixed point in time is costless.⁴¹ It costs me nothing to discover whether I presently prefer safety or convenience. The position is different, however, when the membership of some group has to converge upon a unitary purpose. It would not be costless for my graduate school cohort to decide whether as a collective it favours safety or convenience. And the same is true of legislators and the judiciary - since the subjective rankings of purposes for each constituent actor vary, time and effort must be expended to distil a consensus.

Now, many of the costs of consensus-building do not pertain to informational problems. Instead they have to do with the bargaining process itself - it is costly to resolve deadlocks, to placate hold-outs, to hammer out compromises and such like. But before the individual member of the lawmaking body can even contemplate bargaining, he needs to acquire two types of information. It is necessary, first of all, that he identify those with whom he must bargain. Thereafter, he must elicit their purpose preferences. The structure of decision-making differs considerably under precedent and statute. Accordingly, so do the costs of identification and purpose elicitation. In both respects, legislatures enjoy an advantage over the courts.⁴²

That the courts must resolve disputes means that they must also project impartiality. The outcome of a dispute should, as far as possible, be independent of the identity and ideology of the sitting judge. There are two manifestations of this principle that are germane here. The first relates to what I dubbed identification costs. In many legal systems, the bench is reconstituted every time a claim is brought: judges are assigned to cases through some method that entails an element of randomness.⁴³ This is done so that

³⁹ The problem has recently been examined very thoroughly in the literature: see Fernandes & Ponzetto and Shleifer and Gennaioli (fn 1). The point developed here owes much to those works. The critical point is that those authors are concerned with output efficiency and I am concerned with input acquisition and its cost-effectiveness. Therefore, it is necessary to adapt the points made in that literature to the different problem here.

⁴⁰ Hume, D., 'A Treatise on Human Nature' (1739 JN) 335. There is in philosophy a vast literature on what is called the 'naturalistic fallacy'. It is neither possible nor I think desirable to summarise it here. Perhaps the most famous modern counter-argument is Searle, J., 'How to Derive 'Is' from 'Ought'' (1964) 73 PR 43. At least some purposes will be essentially contested goods, in which case derivation would arguably be impossible - see Gallie, W., 'Essentially Contested Concepts' (1955) 56 *Proceedings of the Aristotelian Society* 167.

⁴¹ By this I do not mean that everyone is born with an innate value system but that no-one develops a new value-system just to produce a norm. If I am asked whether I prefer speed to convenience, there is no way in which I can invest resources into finding a 'right' answer - the matter is one of preference. The position is not the same if I am asked whether the world is flat or round, where an investment is guaranteed at some point to produce the right answer.

⁴² This need not mean that the law that they produce enjoys an absolute advantage in efficiency terms - see the points raised in Section I.

⁴³ This is certainly true in the Anglo-Saxon systems with which I am familiar, as well as a great many civilian ones. It has however been put to me that in the Netherlands and in Germany, the position is different. In the Netherlands, it is apparently perfectly possible to identify the presiding judges on the basis of their specialism. Likewise, in Germany there appears to be a constitutional requirement that it be known in advance, although

litigants cannot identify the judges who will hear their case. The problem, from an information costs perspective, is that if litigants cannot identify judges in future cases, then nor can judges who wish to convince their peers to adopt a given norm.

The second manifestation of the impartiality requirement has to do with elicitation costs.⁴⁴ If a judge expresses some ideological preference too strongly, he may be forced to recuse himself once a related matter comes to be litigated.⁴⁵ So much is needed to disabuse all suspicions of prejudice. But the same measure incentivises judges to conceal their ideological dispositions.⁴⁶ Legislatures, conversely, are blighted by no such defects: the identities of all lawmakers are known in advance. And there are numerous mechanisms which enable and actively promote the elicitation of purpose preferences.

For consistency, let me frame these points within the hypothetical I used before. Suppose that X is a trial judge. He strongly favours safety over convenience out of personal conviction.⁴⁷ For this reason, he wants to set the speed limit at 30 km/h. *A v B* comes before him. To change the law, X must find B liable, and then explain his holding by saying that any speed over 30 km/h is excessive. That explanation must then be affirmed on appeal and then again at cassation.

matching is apparently done by reference to some random element, such as the first letter of the plaintiff's name. In such systems, identification costs will tend to zero, meaning that the cost of producing purposes through the judiciary will evidently be lower. This does not, however, wholly negate my point, so far as judges in those countries must still project impartiality by refusing to openly sympathise with certain types of plaintiff on ideological grounds, a requirement which is not mirrored in the legislature. We may, however, say that in systems in which identification is possible the costs of purpose-production to the courts will be lower than those to the courts in countries in which identification is impossible – but in both hypotheses, the costs of producing purposes through the courts will be higher than those in the legislature, so that the main point in this section still stands.

⁴⁴ The legal realist school argues that there is an inherent contradiction in this idea: see Kennedy, D., *A Critique of Adjudication: Fin de Cicle* (1998 HUP). The extent to which judicial ideology is explicitly acknowledged varies from jurisdiction to jurisdiction, but there is recent evidence to suggest that even in England, which is in this respect the most conservative, ideology plays a role *de facto* if not *de jure* – see Arvind, T. & Striton, L., 'Legal Ideology, Legal Doctrine, and the UK's Top Judges' [2016] PL 418 cf Hanretty, C., 'The Decisions and Ideal Points of British Law Lords' (2012) BJPS 1

⁴⁵ For a high-profile example, see *In Re Pinochet* [1999] UKHL 1.

⁴⁶ I readily concede that there may be differences, in this respect, from system to system. For instance, the judges of the Texas Supreme Court are elected by the general public in a partisan ballot. Their ideological preferences are more easily discernible than, say, those of members of the Supreme Court of the United Kingdom, who are elected by other judges and approved by the Lord Chancellor. But it is surely the case that even the most partisan court will be less ideological than the least partisan legislature - see for example *Republican Party of Minnesota v White* (2002) 536 US 765, in which the right of candidates to speak freely on all issues was balanced against the need to ensure impartiality.

⁴⁷ Assume for now that convictions such as these are genuine. It is also possible for a judge to favour safety over convenience for several reasons which are less authentic. It might be that he is close to the insurance industry, or he might have been lobbied by them, or he might be mesmerised by the breezy insouciance of lawyers who act as counsel for insurers, or he might have taken a bribe. The same can be true of a judge who ostensibly favours speed over convenience but is in reality a puppet of the automotive industry. Glaeser, L. & Shleifer, A., 'The Rise of the Regulatory State' (2003) 41 JEL 401, a summary of which may be found in Chapter 2, shows that inauthentic convictions such as these can have an important effect on the law. I discuss the impact of vested interests in Section II.4 below.

Note, first, that X does not know who the reviewing judges will be. Those will be chosen randomly from some pool once (and if⁴⁸) B appeals. X can do no better than assign an equal probability to every possible combination of appellate and cassatory judges. He must further know, for every possible bench, whether there is a majority of judges who like him favour safety over speed. Yet any judge who has stated openly that he would favour safety over speed would have to recuse himself from *A v B*. This in turn limits the pool of possible judges to those whose purpose preferences are unknown. To X, the cost of estimating the likelihood of success is very high.

Contrast this with the position of Y, a parliamentarian, who has the same purpose preference as X and wishes to implement the same law. Firstly, the identity of the parties whose assent should be sought is given by the roll of Members of Parliament.⁴⁹ Moreover, their ideologies are likely to be a matter of public record: since legislators are elected on the basis of their stated purpose preferences, they need not shy away from announcing them. The cost of information to Y is much lower than it is to X.⁵⁰

⁴⁸ If B does not appeal, X's position is no better – he must wait until another judge applies his norm, and then he must anticipate the identity of the judges who will review the application.

⁴⁹ Does it make any difference that there are generally more Members of Parliament who may vote on a certain law than there are judges who may vote on a certain judgment? If a parliamentarian has to persuade 300 of his colleagues and a judge only 8, it would appear that the judge is at an advantage. However, this disregards two features of the problem. Firstly, where judges are chosen at random, the judge must attempt to persuade all possible upper-level judges, whose number may very well exceed the number of Members of Parliament. Secondly, even if this is not so, Members of Parliament are usually organised in parties and the judiciary are usually not. If a parliamentarian wishes to introduce a new law, he may have to only convince members of such-and-such party, or more typically only its leaders or the leaders of the main factions. A judge, conversely, has to focus on every other judge individually.

⁵⁰ The foregoing is based on a very particular conception of the judge's motivation, or, in technical terms, on a very Posnerian vision of the judicial utility function. (see Posner fn 1) The underlying ideas are that the judge acquires a benefit when the law is changed to suit his ideological preferences, and also that he incurs a cost when overruled. I think it is very likely that this point, although well-established in the juridico-economic literature, would meet with objections from practice, so far as judges often maintain that their sole concern is with justice and so long as in many systems reversal has no obvious reputational consequences. (see for example Klein, D. & Hume, R., 'Fear of Reversal as an Explanation for Lower Court Compliance' (2003) 37 LSR 579) What I want to show now is that even if this utility function is replaced with another, the point I just made stands, that is, the courts remain inferior to the legislature. Firstly, consider the possibility that judges are entirely unconcerned with being reversed – they neither gain nor lose. If this is so, then we would expect judge A to have no hesitation in announcing that he is deciding for such-and-such party out of such-and-such ideological reasons. This would make it easier for him to coordinate with the appellate courts, but the whole procedure would still be cost-ineffective relative to the legislative one. Why so? X cannot negotiate with the appellate judge directly, since to permit this would be to jeopardise the whole purpose of having a second court review the findings of the first. He may thus only hope that the appellate judge shares his ideology. The same is not true of Y, who may freely negotiate concessions and make compromises with other parliamentarians so that a purpose may be produced. Consider, finally, the case in which the judge's utility is increased from being reversed, for example because it gets him talked about or because dissents are known to be influential or because he fancies himself a contrarian. Real-life examples are not hard to come by. A contrarian A has a strong incentive to produce a purpose, but in doing so he is likely to select it so that the appellate judge disagrees. Thus there is under this hypothesis in fact a possibility that the judiciary will be unable to agree on a purpose even if they all share one – clearly, this is less cost-effective than a parliamentary arrangement.

II. Refinements

1. Time

Even if everything I have said so far is persuasive, it is incomplete. I have so far assumed that at T1, information is brought to the lawmaker. Then at T2 a norm is passed. There is no T1 in reality. The lawmaker does not acquire all the needful information at a discrete point in time. He accumulates it gradually. As between courts and legislatures the rate of accumulation differs, so that the temporal dimension of the problem matters.⁵¹

The point that I wish to make in this respect is the following: society prefers having good norms sooner rather than later. For brevity, I will call this phenomenon the time value of norms. The courts accumulate information at a rate which is equal to the rate of litigation. If the rate of litigation corresponds to the time value of a given norm, the courts are cost-effective. Under statute, the rate of accumulation is set by the legislator – he may choose when to ‘buy’ the information that he wants. Consequently, if the rate of litigation is not equal to the time value of a norm, statute could (but need not) be more cost-effective than precedent.

This requires some elaboration. Norms are valuable to society, as is time. From this it follows that society is likely to prefer that desirable⁵² norms be implemented sooner rather than later. If it is known that the optimal speed limit is 50 km/h, it is better to implement it today than to wait until tomorrow.⁵³ The rate of litigation corresponds with some exactitude to the urgency with which a norm is needed, that is, to the time value of that norm.⁵⁴ How so? If there is no speed limit, there will be many accidents. The victims of those accidents will sue drivers for compensation in negligence. A high number of accidents will translate into a high rate of negligence litigation. With intense litigation, information that is relevant to the speed limit will be transmitted rapidly to the courts. And once there is enough information, the judiciary will change the law. All other things

⁵¹ If courts are cost-effective in the static sense but deliver norms a hundred years after they are needed, then the legislature may very well be preferable. And vice versa.

⁵² This, only holds categorically if we assume that the 50 km/h speed limit is optimal. It may very well be the case that we prefer a good law tomorrow to a bad law today. The costs of undesirable events occurring under the bad law may well outweigh the benefits of its quick promulgation. If the lawmaker erroneously believes that 260 km/h is the optimal speed, many lives would be saved if he could postpone that law’s passage until he has better information. There is a pressure to promulgate norms quickly, and there is also a countervailing pressure to wait until better information becomes available. In this section, I only deal with the first limb of the problem. I will discuss the sufficiency of information in the next.

⁵³ Equivalently, we may say that delaying norms has a cost to society. These may include, firstly, the cost of undesirable events occurring under the old law. Suppose that our only purpose is to minimise the number of accidents, that the speed limit is 60 km/h, that on average there are 100 accidents per day on the roads, and that we know certainly that under a 50 km/h speed limit, that number will drop to 80. For every day in which we delay the passage of the new law, society ‘loses’ the cost of 20 accidents. Secondly, there is the cost of legal uncertainty. Suppose that an insurer is looking to set premium levels for the next year. For so long as he does not know the probability with which this will happen over the next year, he cannot price risk accurately.

⁵⁴ The idea is from the ‘efficiency of the common law’ literature – see for example Priest, G. & Klein, B., ‘The Selection of Disputes for Litigation’ (1984) 13 JLS 1. There, it is sometimes dubbed the ‘differential litigation’ theory because the conclusion is that inefficient rules are challenged more often than efficient ones. For a critique see Cooter, R. & Kornhauser, L., ‘Can Litigation Improve the Law without the Help of Judges’ (1980) 9 JLS 139.

being equal, the speed of the judiciary's response will therefore be sensitive to the time value of the norm. Like with brute facts before, this relationship obtains because of the courts' dispute-resolution function. So there is no reason to expect the legislature will accumulate information at the same rate. In this general case, therefore, precedent is more cost-effective.

However, instances are conceivable in which the time value of a norm is not reflected in the litigation rate. Suppose, in the hypothetical that I just used, that there is an immutable rule of procedure which prohibits the estate of a deceased person from suing in tort. Information about the speed limit will then only be transmitted to the courts by those fortunate enough to survive collisions. Since a significant proportion of cases will not reach the courts, the rate of litigation will lag behind social demand for a speed limit. The trickle of information that does reach the judiciary will at some point result in the accumulation of sufficient information and the promulgation of a norm. But before that point is reached many lives will be lost, for want of litigation rather than social interest.

Is this remediable? Recall that the courts are dependent on litigants for information but the legislature can 'buy' it if it so deigns. It is also free to make the 'purchase' at a time of its own choosing. In the terms used here, the legislature can control the rate at which it accumulates information. It may, in the hypothetical, commission a survey of road accidents and observe the number of deaths that occur every month. Conducting that survey is costlier than letting the issue rest with the courts. But the savings from the timely introduction of a speed limit may well exceed the initial outlay on information.

To illustrate the latter point, suppose that if the speed limit is left to the courts, the norm would cost nothing but would take a year to produce. To the legislature, the survey in question would cost £100,000 but the relevant information would be available in two months. Without a speed limit, one-hundred die every month. With a 50 km/h speed limit, that number drops to ten. Since the speed limit would save ninety lives a month, the legislature can effectively pay £100,000 to save 900 lives. Statute, therefore, appears to be more cost-effective.

That proposition is however not plenary. Suppose that the speed limit is 45 km/h, there are ten deaths a month, and twenty employees are late for work every month. If the speed limit were 50 km/h, there would again be ten deaths a month, and nineteen employees would be late for work. The 50 km/h speed limit therefore strictly dominates the 45 km/h one. It is possible for the legislature to 'pay' £100,000 to survey traffic-related absenteeism and the results will be ready in two months, or the courts can take a year and obtain the same information for free. Since the social cost of the ten work absences that will occur in the interim is much lower than £100,000, the legislature's expenditure on accelerating the accumulation of information would be cost-ineffective.

To generalise, the rate of litigation will ordinarily correspond to the time value of a norm. In that ordinary case precedent will, *ceteris paribus*, be more cost-effective. When the rate of litigation is lower than the time value of the norm, the legislature can accelerate

the accumulation of information. Acceleration comes at a cost – the legislature pays for what the courts acquire for free. Whether its investments are effective is context-sensitive: the matter turns on the cost of delay versus the cost of the legislature’s inquiries.

2. Uncertainty

In a certain sense, I have thus far treated information analogously to a tangible good. The analogy is in that same sense inexact. If I decide to make a chair, I should be able to tell if I have enough timber. But if I decide to make a law, I cannot know if I have enough information. More formally, I previously assumed that it is costless for the lawmaker to determine whether he has sufficient information to produce a norm.⁵⁵ I propose now to dispense with this fiction and to compare the fashion in which courts and legislatures make determinations of informational sufficiency.

The analysis is similar to but more involuted than that of purposes before. Let us posit, along Rumsfeldian lines, that relative to sufficiency there are three categories of information - known knowns (‘vehicles can reach speeds of up to 350 km/h’), known unknowns (‘we do not know how many accidents there would be if the speed limit were 60 km/h’) and unknown unknowns (‘we do not know whether there is a relationship between the speed limit and factors other than convenience and safety’). The lawmaker can always determine the sufficiency of his information correctly if his considerations only touch on known knowns and known unknowns. But unknown unknowns are intractable. Their existence, importance, and impact are by definition unforeseeable.⁵⁶ For this reason, it is impossible to gauge their salience to the norm production process.

Driven to its terminus, this reasoning forestalls norm production altogether. Whether there are unknown unknowns is in itself an unknown. Any norm can have unintended consequences. Their magnitude always defies estimation. So it would only be possible to make predictions about a norm’s impact once all unknown unknowns are reduced to known unknowns, that is, until we have at our disposal a complete or near-complete representation of the world. But since the accumulation of complete or near-complete information would take an infinite or near-infinite amount of time, norm production would remain postponed in perpetuity.

In practice, some uncertainty⁵⁷ must be tolerated. How much is a matter of subjective preference. No-one can tell what the ‘correct’ amount of uncertainty is. The statement

⁵⁵ I said in the preceding section that anyone would prefer an optimal speed limit today to an optimal speed limit tomorrow. This is not true of a sub-optimal speed limit of the type that may be designed with insufficient information. It may very well be the case that we prefer a good law tomorrow to a bad law today. The costs of undesirable events occurring under the bad law may well outweigh the benefits of its quick promulgation. If the lawmaker erroneously believes that 260 km/h is the optimal speed, many lives would be saved if he could postpone that law’s passage until he has better information. There is a pressure to promulgate norms quickly, and there is also a countervailing pressure to wait until better information becomes available.

⁵⁶ A somewhat less cryptic way of saying the same is to posit that the unintended consequences of a policy cannot be foreseen before its implementation.

⁵⁷ I mean uncertainty in Knightian terms, rather than risk: it would be incorrect to say that, for any one course of action, there is a 0.8 probability that some unforeseen consequence would be triggered.

'there is sufficient information to act now' is akin to an 'ought'. It eludes proof as well as disproof. As with purposes, it is easier to coordinate uncertainty preferences within a legislature than within the courts. Suppose that X is a parliamentarian who wishes to pass a 50 km/h limit today rather than in a year's time. To succeed, he needs to find a majority of parliamentarians who believe that there is presently sufficient information to justify legislative action. That search is wholly manageable within the legislature's decision-making process – X must find, in the list of parliamentarians, a sufficient number of persons who agree with his view. Consider, conversely, the position of judge Y who holds the same opinion as X. He would have to convince a number of judges, their identity indeterminable, that enough is known about speed limits to warrant legal change. It is likely to be much costlier, to Y, to determine whether he is likely to succeed.⁵⁸

Does this mean that the courts are always paralysed by indecision, so that we must have all laws made in legislatures? I think not. That it is easier for the legislature to decide that it has insufficient information does not mean that it will also find it easier to remedy the insufficiency. Delegating a matter to the courts may still be effective. To revive an earlier analogy, if I know that I do not have enough timber to make a chair, it does not automatically follow that I should go to the forest and start cutting trees. It might be better to buy the timber from my neighbour. Likewise, that the legislature can tell that it does not know enough to legislate does not mean that it should acquire the necessary information itself – it might still be prudent to leave that task to the courts.

How, then, does the cost of sufficiency determinations intrude into the organisation of norm production? It bears intimately on the choice of metanorm.⁵⁹ The legislature is better-equipped to resolve the sufficiency problem positively, by deciding that there is sufficient information or by deciding to 'buy' that information. It is also capable of resolving that problem negatively, by delegating the acquisition of information to the court. The choice between the positive and the negative resolution can be made cheaply under statute and at great expense under precedent.⁶⁰ Norm production competences can be more effectively regulated by the legislature.⁶¹ Under normal conditions, that is, if the time value of a norm is reflected by the rate of litigation and information has to be transmitted rather than produced, delegation will be more cost-effective than legislation.

⁵⁸ Note, however, that unlike in the case of purposes, there is nothing within the judicial institution that prevents judges from expressing views on the amount of uncertainty that they are willing to tolerate. The point here is that there is also no institutional mechanism that forces them to reveal their uncertainty preferences either.

⁵⁹ See fn 6 for an explanation of the term.

⁶⁰ Note, further, that it does not make sense to abstract one level further and to ask whether a judge should decide whether another judge should decide whether judges in principle should deal with some question.

⁶¹ This is an uncontroversial conclusion. It mirrors practice perfectly. The way in which the conclusion is reached, however, is I think useful or at least interesting. There was no need, at any juncture, to evoke democratic legitimacy to justify the legislature's supremacy. It is not better because it is elected. It is simply a more effective delegator. This is best seen if one transposes the analysis to a suppositional system in which judges are democratically elected and legislatures are not. It would still be true that judges would find it difficult to coordinate themselves due to the manner in which courts constitute themselves. And it would still be easy for the legislature to arrive at a consensus, so far as the identities of the lawmakers are known throughout the norm production process.

But the question of whether conditions are normal or exceptional is a matter best left to the legislature.

3. Precedent and Statute Combined

I have so far assumed that the legal system is either exclusively statutory or exclusively precedential. This allowed me to examine the two technologies in isolation, and to highlight the main differences. That gain came with a corresponding loss of realism. In real polities, there are usually both courts and legislatures. Both produce norms. Accordingly, I would now like to switch from a discussion of precedent or statute to one of precedent and statute. The capital consequence of that shift is that the courts and the legislature can co-operate⁶², which enhances the aggregate cost-effectiveness of the legal system. Cooperation however comes at a cost, in that coordination is costly. Consequently, the allocation of lawmaking competences as between the courts and the legislature still matters, albeit less so than it might have appeared previously.

When I developed the basic analysis, I said that the courts are better when it comes to brute-fact information and the legislature is better for contingent facts and purposes. The production of any norm will involve all three categories of information. If the courts make some norm, we economise on brute facts but we waste resources on contingent facts and purposes. If the legislature makes the norm, we economise on contingent facts and purposes but we waste on brute facts. If we combine precedent and statute, we may have the courts elicit brute-fact information from the public and the legislature produce contingent-fact information and a purpose. This is clearly better than using either in isolation.

Suppose that parliamentarian X, who favours safety over convenience, wants to produce a speed limit. At the same time, *A v B*, the home relocation case, is before judge Y, who like X strongly prefers safety to convenience. Under the precedent-or-statute hypothesis developed earlier, it is cheap for X to determine whether the legislature as a whole favours safety over convenience. But it is expensive for him to pinpoint the specific risks of high speed. Y can learn about those risks cheaply – A and B will supply the needed information for free. But it would be expensive for Y to find out whether other judges share his enthusiasm for safety. If the system mandates that it is either X or Y who produces the norm, diseconomy is inevitable: either X will formulate a cheap purpose and then spend wastefully on forming a legislative committee to observe the perils of high-

⁶² It is also theoretically possible that the courts and the legislature will compete. The reason I do not discuss this possibility is that it is in modern polities remote – even in common law jurisdictions, statute will virtually always trump common law, and the courts will usually defer to the legislature. My intuition is that if it were possible for the courts to compete with the legislature, there would be a great deal of duplication and waste – the courts would gather the same information as the legislature already has, or vice versa. One may say that the analysis is in some way similar to that of natural monopolies, of which the provision of law must surely be one. This said, there is an argument on the output side to the effect that having competing norm-producers will result in more efficient norms (though that theory is silent on the cost-effectiveness of norm-acquisition): see Zywicki, T., 'The Rise and Fall of Efficiency in the Common Law' (2003) 97 NULR 1551.

speed road travel, or Y will observe those risks cheaply and then waste time and effort on discovering the policy preferences of his peers.

If X and Y can work in tandem, then there are two ways in which the diseconomy may be avoided. Y may decide the case and report on the dangers of vehicular speed without stating a purposes preference. X may then use this information and coordinate upon a purpose cheaply, thus producing a law. Alternatively, X may coordinate cheaply upon some purpose with his fellow parliamentarians. Y may then take the purpose produced by the legislature and turn it into a concrete norm with the help of A and B.⁶³ In either case, precedent-and-statute comes out superior to precedent and statute alone.

Is it possible to take this one step further and say that precedent-and-statute is optimal, that is, that any combination of the two will yield norms at the lowest possible cost? If this is correct, then it would not matter whether lawmaking competence is allocated to the legislature or to the courts. If the designated primary lawmaker is ineffective, he may always avail himself of the expertise of the one which is secondary. I think such optimism would be misplaced. Precedent-and-statute would only be optimal if use of the secondary lawmaker were costless. In the example above, brute-fact information is gathered by the judge and purpose information is generated by the parliamentarian. This can only happen if the parliamentarian knows that the judge will generate the brute-fact information that he needs or if the judge knows that the legislature will supply the purpose which he lacks. If the judge is unsure whether the legislature will make a definitive choice between safety and convenience, it might still be worth his while to produce one himself, with the attendant diseconomies. Likewise, if the parliamentarian is unsure that he will acquire information about the consequences of high-speed driving from the judge, it might be sensible to set up an investigative committee instead.

The problem would solve itself if X and Y could coordinate their actions. Yet there are considerable limitations on the ability of the judiciary and the legislature to coordinate. First of all, it would be very costly for every parliamentarian to learn the entire docket of every court in the land. It would be equally implausible to expect every judge to know the agenda of every parliamentarian. A great many opportunities to coordinate are foregone simply because the legislature does not know that the courts can obtain some information more cheaply, or vice versa. Second, even if the judge in some matter knows of the existence of a parliamentarian with an interest in the issue at stake (or if a parliamentarian knows of a case that touches on an item on his agenda), for coordination to occur without friction the two would have to be able to enter into agreements. Yet such agreements would foul basic constitutional tenets: it would be deeply repugnant to the rule of law to have an elected politician tell a judge how to draft some judgment. It would be equally repugnant to democracy if unelected judges could dictate the parliamentary agenda.

⁶³ This would be the case if Parliament were to pass an Act which sets a standard, such as 'anyone found driving at an unsafe speed shall be liable to a fine'. The courts may then define 'unsafe speed' as 'anything in excess of 50 km/h'. The point is implicit in Kaplow (fn 3).

The two branches may, however, signal their intentions to one another. For example, the parliamentary majority may state what its legislative plans for the coming year are. Or a court may, in deciding a case, urge parliamentary action. Likewise, the legislature may say that it plans to leave a certain matter to the courts, or the courts may state that they wish to leave some other matter to the legislature. This allows for a degree of imperfect coordination. Each lawmaker can indicate its intentions, but it cannot commit itself credibly to carrying them out. If, for instance, judge Y states that he believes that the purpose of the speed limit is a matter that parliament must review urgently, there is no guarantee that parliament will in fact do so. Y, knowing this, may rationally decide to use the courts' cost-ineffective purpose-production technology even if a superior alternative is available.⁶⁴ Likewise, if parliament decides to issue some broad standard and wait for the courts to determine its actual content, there is no guarantee that the courts will in fact do so. Aware of these limitations, the legislature may decide to use its ineffective brute-fact gathering mechanisms, even though a more economical means of achieving the same end exists in principle.

Where does this leave us? One way of avoiding the cost of coordination altogether is to assign specific lawmaking competences to the lower-cost institutions. If, for example, a particular issue is ideologically neutral but heavily laden with brute-fact problems, then the courts would be better-placed to resolve it. Conversely, if some matter excites ideological dissent even though the facts are readily discernible, the legislature is more cost-effective. Since different legal systems allocate these competences differently, we may expect that some will be more cost-effective than others. Before I discuss the concrete implications, however, I propose to complete the theoretical analysis by considering the operation of interest groups.

4. Interest Groups

Interest groups hold more information than individual citizens. If one institution is more able to attract interest-group patronage, then the corresponding rule-production technology will enjoy a clear advantage over the other. In developing this point I will as before move from the simple to the realistic. Firstly, under the basic precedent-or-statute paradigm, interest groups behave in the same way irrespective of the choice of norm-production technology. This is so because if one institution has a monopoly on making law, then interest groups have no choice but to transmit its information to the monopolist. Secondly, under precedent-and-statute, individual interest groups can choose between lawmakers. But that choice depends on factors which are unrelated to norm-production technology. Thirdly, once competition between interest groups in a mixed system is considered, it becomes obvious that information will always be dispersed between the courts and the legislature. Coordination, and with it its costs, is inevitable.⁶⁵

⁶⁴ To revisit an earlier example, it was open to Lord Muncrief to decide *Donoghue* under the then-applicable rule and then to ask Parliament to consider the information that had been gathered. And it would be specious to suppose that he was not aware that this was one possible avenue of action.

⁶⁵ What of the verification issue discussed at n 24. This is critical here, since an interest group has a much greater interest in delivering skewed, or outright false, information to the legislature – there is a tremendous return on

A. One Interest Group and One Lawmaker

I will begin by considering the behaviour of a single interest group under precedent-or-statute. I define an interest group as a party with a long-term interest in the content of the law. Formally, we may say that an agent is an interest group if it can extract rents from there being a certain norm in force. Recall that in $A \nu B$, the parties only cared about the outcome of their dispute. Let us now suppose that there is also a liability insurer C. He wants the speed limit to be 20 km/h. This would increase the overall amount of liability in society, and concurrently the total amount of risk that can be underwritten.⁶⁶ For so long as the speed limit is 20 km/h and not, say, 50 km/h, C may expect his profits to be higher – he is to our ends an interest group. C is likely to possess much more information about the relationship between vehicular speed and accidents than individuals like A and B. This is so because C's economic interests are affected by the general incidence of collisions in society: in order to price his services, he needs to know a great deal more than a rationally apathetic individual like A or B.⁶⁷

A cost-effective norm production technology would incent interest groups to transmit their information to the lawmaker. How this may occur in legislatures is well-documented – the interest group communicates its knowledge to parliamentarians in

mendacity in the form of rents. Moreover, economies of scale mean that an interest group can invest quite a lot on skewing and supressing information, so that its ability to do so and remain undetected is considerably higher than that of the rationally apathetic individual – an individual might lie about his smoking habits, but Big Tobacco can produce tremendous bodies of research showing that there is no correlation between smoking and cancer. The difference is palpable. Does this impact the analysis? Again, I think not. For there to be any difference, it needs to be shown either that the courts are systematically better at detecting such deception than the legislatures, or alternatively that the obverse is true. Since there is no difference in the forensic technologies available to the two, there is in general no reason to suppose that this is so. On first impression this runs contrary to a well-established intuition from the public choice literature, in that it is possible for an interest group (such as Big Tobacco) to induce politicians to act in its favour by offering campaign funding and thus increasing politicians' chances of reelection, whereas the same is less likely to be the case for the judiciary since judges are guaranteed life tenure. (see Landes & Posner (n 1)). That, however, has to do with output efficiency rather than the cost-effectiveness of the information-acquisition technology. If a legislator systematically produces norms on the basis of information which he knows to be skewed or wrong, this does not mean that the cost of acquiring correct information would to that legislator be higher than it would be to a judge. Likewise, if a judge systematically refuses to use skewed or wrong information, this does not mean that to him the cost of discovering that the information in question is skewed or wrong is higher than it would be to a legislator. The public choice point, translated to the terms here, is that the legislator might systematically refuse to make an investment in verification whereas a judge would not – but this is entirely neutral on the cost-effectiveness or cost-ineffectiveness of such investments being made. Thus unless it is shown that judges possess some superior technology for unmasking the machinations of interest groups, the verification problem does not intrude into the cost-effectiveness comparison. In saying this, I hope I have not given the impression of underplaying the importance of the public choice point to the output of precedent and statute – this is surely critical. But my concern here is exclusively with the input side of the problem – as I remarked in Section I, the theoretical framework that I use is ill-suited to comparing outputs.

⁶⁶ I base this proposition on Viscusi, W., 'The Dimensions of the Product Liability Crisis' (1991) 20 JLS 147. It does not make a difference if one supposes that the insurer instead wants a higher speed limit so as to minimise his short-term liability to those already insured – all that matters is that he prefers one norm over another.

⁶⁷ The idea is not in any way novel – see Stigler, G., 'The Theory of Economic Regulation' (1971) 2 BJEMS 3, 11.

exchange for rents.⁶⁸ There is an analogous transmission mechanism under precedent.⁶⁹ To C it matters little whether the 20 km/h speed limit comes from a court judgment or from an Act of Parliament. To secure the desired norm, he may litigate strategically⁷⁰ or pay others to do so on his behalf. Every time a speed limit case is litigated with C's involvement, he gets an opportunity to convince the courts to promulgate a 20 km/h speed limit. And to convince them, he uses the information that he has in his possession. The courts here 'pay' for C's information no more than the legislature does under statute – the insurer simply transmits it in exchange for rents.⁷¹

Thus in the simple precedent-or-statute analysis, precedent and statute are equivalent. If the system is exclusively precedential, the courts will receive the insurer's information through strategic litigation. If it is exclusively statutory, the legislature will receive it through lobbying. The point is I think intuitive: an interest group demands regulation and the courts or the legislature supply it. If we set up the problem as a choice between mutually exclusive norm-production technologies, we effectively say that there is a monopolist.⁷² Unsurprisingly, changing the identity of the monopolist does not change demand-side behaviour.

B. One Interest Group and Two Lawmakers

In real legal systems, precedent and statute coexist. It is possible for the interest group to choose between alternative suppliers of norms. In choosing, it balances costs against benefits. On the benefit side, there are the rents that stand to be extracted. The costs are those of lobbying the legislature and of prosecuting strategic claims.

Let us first consider the potential benefits that an interest group can secure in each forum. For simplicity, we may say that C's profit will increase by £1,000,000 per year for every year in which the 20 km/h speed limit remains in place. Now, there are clearly two components to this: the money-value of the rent itself and its durability. I do not think there is any systematic difference between the size of the entitlements that courts and

⁶⁸ It is at the root of the theory of public choice. For an overview see Hertog, J., 'General Theories of Regulation' in Bouckaert, B. & de Geest, G. (eds), *Encyclopaedia of Law and Economics* (EE 2000). The foundational expositions are Stigler (ibid) and Becker, G., 'A Theory of Competition among Pressure Groups for Political Influence' (1983) 98 QJE 371.

⁶⁹ The point is made in Rubin, P., Curran, J. & Curran, C., 'Litigation versus Legislation: Forum Shopping by Rent Seekers' (2001) 107 PC 295, Rubin, P. & Bailey, M., 'The Role of Lawyers in Changing the Law' (1994) 23 JLS 807, White, M., 'Legal Complexity and Lawyers' Benefit from Litigation' (1992) 12 IRLE 381, Crew, M. & Twight, C., 'On the Efficiency of Common Law: A Public Choice Perspective' (1990) 66 PC 15, Glaeser & Shleifer (47).

⁷⁰ As an insurer, he is likely to be subrogated into a great many claims against high-velocity drivers. In ordinary circumstances, that is if there were no rents to be extracted, those cases will often be easy to settle. The insurer may, however, choose instead of settling to litigate with great frequency. This is rational, for every time he does so in a precedential system, he gets an attempt to convince the courts to introduce a 20 km/h speed limit.

⁷¹ Does this change if, instead of a problem of transmission, we have one of production? Suppose that the software from the *A v B* case can be produced for the purpose of a claim that C is prosecuting strategically. The sole difference is that the value which he attaches to the success of his claim is higher than the expected award: it equals his expected rents. Consequently, he would produce the software whenever those expected rents exceed the costs of the software. The same would be true under statute - the insurer balances the investment in information production against his expected rents.

⁷² The point is implicit in Landes & Posner (fn 1).

legislatures distribute.⁷³ But there is a difference in their durability. Recall that there is in all legal systems a metarule to the effect that precedent is subservient to statute.⁷⁴ It follows that any court-produced norm is less entrenched than a statutory enactment. An Act of Parliament can be overruled only by another Act of Parliament, whereas a judgment can be overruled by another judgment *and* by a legislative enactment. Consequently, all other things being equal⁷⁵, we would expect that a precedential holding would be less durable than a legislative one.⁷⁶

What of costs? To the interest group this boils down to a comparison between the costs of strategic litigation and the costs of lobbying. There may well be systematic variance between the two. But its determinants are unrelated to the choice between precedent and statute. For example, the cost of lobbying the legislature might be influenced by prohibitions and restrictions on lobbying, the rigour with which those are enforced, the structure of the legislature, and its composition. The cost of strategic litigation depends, among others, on the cost of legal services, judicial remuneration and tenure, rules on standing, the availability of class actions, contingency fees, third-party litigation financing, as well as fetters on the right to appeal like *certiorari*. None of these factors are inimical

⁷³ By this I mean that I do not believe that there is any systematic difference between the courts and the legislatures' ability to distribute entitlements – if one wishes to legalise abortion, *Roe v Wade* (1973) 410 US 113 would achieve this as well as the Abortion Act 1967. An argument to the contrary is presented in Epstein, R., 'The Social Consequences of Common Law Rules' (1982) 95 Harvard LR 1717. It is at the very least arguable that Professor Epstein's argument captures the position in the US and to an even larger extent in Britain – but my concern here is with precedent in general rather than the juridico-intellectual climate in any specific country.

⁷⁴ This is self-evidently true in civilian systems, where precedent does not even formally exist and judicial decisions are only persuasive. It is also true in England under the principle of parliamentary sovereignty – no judicial decision may annul an Act of Parliament and any Act of Parliament will always overrule all inconsistent judicial decisions. We may only speak of an exception in places where there is a constitution and a constitutional court issues a ruling interpreting it in a way that constrains Acts of Parliament – *Roe v Wade* (1973) 410 US 113 would be a case in hand, for Congress cannot annul it even if it so desires. Where this is the case, the interest group would value the precedent more highly than statute – *Roe* is clearly preferable to a congressional enactment which a subsequent Congress can overrule. But since the majority of norms that interest groups desire do not fall so clearly within the purview of constitutional review, I only consider this possibility in passing.

⁷⁵ The assumption is not as heroic as it might appear at first – there is no conceptual reason to believe that courts depart from precedent more or less often than parliaments repeal legislation. In practice, we may observe a volatile precedential system in which holdings supplant one another every one or two years, or a very stable one in which the law is seldom disturbed. Likewise, some Acts remain on the statute books for hundreds of years, whereas others are repealed a year after their introduction. I cannot conceive of any reason why the courts would be inherently more likely to be volatile in their jurisprudence, or, conversely, why one may expect the legislature to oscillate between norms – it is possible to conceive of situations where one or the other is true, but none of those are due to the inherent characteristics of the norm-production technology.

⁷⁶ There is a potential objection here, in that it may be said that the degree to which precedent is followed in a given jurisdiction impacts its durability. Although this is intuitive appealing, I do not think it holds – recall that the interest group is making a choice between the courts and the legislature, and will only choose the courts if the precedent it can get is more durable than an equivalent statute. Now, if there is a strong doctrine of precedent such as the common law *stare decisis*, we may expect that precedent in itself will be more durable in such a system than in a civilian law one. But the common law precedent will still be less durable than a statutory entitlement, plainly because its likely survival is threatened by the potential enactment of a statute, whereas the obverse is not true – a statutory enactment is never threatened by contradictory precedent. In simpler terms, we may say that increasing the binding force of precedent can never result in precedent becoming superior to statute, so that the benefit of a statutory holding is to the interest group always higher.

to either precedent or statute. It is perfectly possible to have a mostly statutory system in which, through say lax rules on third-party funding and *certiorari* combined with stringent controls on lobbying, interest groups are steered toward the courts. Likewise, it is possible to have a precedential system in which strict standing rules work to deter interest groups from using the courts but in which political donations are unfettered, making the legislature very attractive.

If this is correct, then it appears that if one is designing a precedent-and-statute system, one also has a separate choice between channelling interest groups to either the courts or the legislature. The two decisions may be made independently of each other. We may have a mostly precedential system in which interest groups go to the legislature. Equally feasible is a mostly statutory system in which interest groups go to the courts. This can be achieved through amplifying or lessening the difference between the costs of strategic litigation and lobbying respectively, subject to the proviso that if we wish to direct interest groups to the courts, we must ensure that the savings from using strategic litigation are higher than the benefits of a more durable statutory enactment.⁷⁷

C. Two Interest Groups and Two Lawmakers

The significance of the foregoing is limited. It is premised on the idea that there is a single interest group which chooses between two providers of norms. But rent-seeking is very frequently a contest. For example, if the insurer C wants the speed limit set at 20 km/h, there is also bound to be a haulier D who wants it set at 70 km/h – this would allow him to compete more orders every day. Competition between the two, I will argue, results in the dispersal of information between institutions. If D succeeds in the legislature, C has an incentive to challenge him before the judiciary.⁷⁸ If instead it is C who lobbies, D will

⁷⁷ I said earlier precedent-and-statute is superior to precedent or statute alone, but also that there is a positive cost of coordinating the actions of the two lawmakers in the polity. One may therefore expect that the system would benefit greatly if the great majority of information is steered to the institution which ends up producing the norm at the end, since to do otherwise would introduce coordination costs. If the insurer C's information goes to the courts but the speed limit is produced by the legislature, then conveying that information from one institution to the other is going to be costly. The same would be true if the insurer submits his information to the legislature but the courts end up introducing the speed limit. It follows that, if cost-effectiveness is the only desideratum of the designer of the system, she ought to ensure that interest groups are channelled to whichever institution is tasked with producing the ultimate norm: in a predominantly statutory system, it would be best if C's information goes directly to the legislature, and the obverse would be true in a predominantly precedential one. There are limits to the usefulness of this point: when it comes to interest groups information cost-effectiveness is very far from the only desideratum: steering them to one institution may allow them to skew the law in their own favour, which may be inefficient or unfair. Thus Landes & Posner (fn 1), reasoning along output efficiency lines, suggest that competence should be divided to guard against capture.

⁷⁸ The extent to which C can be challenged depends on the progress that he has made. For example, if C has already secured a 20 km/h speed limit, D cannot truly try to have the courts set it at 70 km/h, unless he can find some way of bringing the situation within the scope of judicial review. This does not, however, mean, that a group which is lobbying the legislature before the courts can *never* be challenged through the courts. Firstly, if C is only in the process of lobbying for a 20 km/h speed limit, D can still petition the courts for a 70 km/h one. Secondly, once C has his concession on the speed limit, he is likely to push for others – a mandatory requirement for all passengers to wear seatbelts at all times, a ban on driving for more than four hours a day. This strategy would exhibit increasing returns once the initial investment has been made into lobbying for a lower speed limit. Since all of these measures also stand to harm D, he is likely to oppose them, and the courts are again likely to be a more effective venue.

go to the courts. Since both C and D hold relevant information, the courts and the legislature have to coordinate. Consequently, in this last (and I think most realistic) setup, the channelling of interest groups to one forum or another makes no difference. Some interest groups will use the legislature; others will use the courts. The two fora must coordinate irrespective of the allocation of lawmaking competences.

Once an interest group begins investing in its chosen forum, the costs of using that same forum rise for all other interest groups. However, the costs of using another forum remain unaffected. The second mover is thus better off using the other forum. The informational effect of this is that the information the two interest groups hold is split between the two fora.⁷⁹ Suppose that both the courts and the legislature can announce a speed limit, the benefit of obtaining a statute is greater and the costs of strategic litigation and lobbying are, for simplicity, equal. C wants the speed limit to be 20 km/h, D wants it to be 70 km/h, and C gets to move first. Since C is better off with a statutory enactment, he would rationally choose to lobby. Once C has submitted his information to the legislature, he has also increased the likelihood that the legislature will make the speed limit 20 km/h. This in turn decreases the likelihood that the legislature will make the speed limit 70 km/h. The two remain, however, equally likely as far as the courts are concerned. Consequently, D is better-off commencing strategic litigation. Once D does this, the courts have D's information and the legislature has C's information. If all of the available information is to be used, the two have to coordinate, with the attendant costs.⁸⁰

The only way to avoid the cost of coordination, on this hypothesis, would be to switch to a system in which there is only one lawmaker – that is to a system which is either purely statutory or either purely precedential. Quite aside from the efficiency implications of

⁷⁹ For completeness, I should discuss the possibility that both interest groups make the decision simultaneously at T0. I think this possibility is not very relevant in practice, since the interests in question will usually coagulate at different times, so that one will always have a first mover advantage. Supposing, however, that the two decide simultaneously, then either each will spread its investments over the two institutions, which results in a need for coordination as before, or each will compete with the other with a probability of 0.5. In the latter case, the need for coordination will arise whenever the whole competition is repeated numerous times, which will often be the case: it would be illogical to assume that if the insurer gets his speed limit, he will not also attempt to petition the legislature for restrictions on driving at night, restrictions on the tonnage of cargo and so on, or that the haulier will not oppose such measure consistently. Thus in the long run a need for coordination will inevitably arise.

⁸⁰ It may be contended that given the appropriate institutional arrangements, the cost of using one forum may be so high that, even with the cost of competing taken into account, a second-mover interest group would still prefer to match the forum of the first mover. For example, if strategic litigation costs £1,000,000 and a precedent gives rents of £1,100,000 whereby lobbying costs £100,000 and gives rents of £2,000,000, then whenever the additional cost from competition is lower than £800,000, it would still be rational for the second mover to match the forum of the first. This is in the short-term correct. But as competition between interest groups is likely to be a permanent feature of the process, the cost of competition is likely to increase over time – the more entrenched the first mover, the costlier is it for a new entrant to upset him in his favoured forum. Supposing that this process extends indefinitely, there is bound to be a time at which using the other forum becomes, to the new entrant, rational. In the numerical example above – it is likely that the cost of lobbying would be £100,000 at the time when the first-mover begins to lobby, but as he continues to do so the cost to all new entrants will increase. As soon as it becomes higher than £1,900,001, using the courts becomes advantageous. And as soon as one interest group begins to use the courts, the need for coordination between courts and legislatures arises, along with its cost.

forestalling inter-group competition in this fashion,⁸¹ to do so would be cost-ineffective for reasons identified in the basic form of the analysis. Under a precedential system, contingent-fact and purpose information would be acquired in a cost-ineffective fashion. And under a statutory one there would be ineffectiveness when it comes to brute facts. Provided that these diseconomies are larger than the cost of coordination under a mixed system, the cost of coordination is thus an inevitability.

Where does this leave us? It transpires that although interest groups hold quite a lot of information which is needed to produce law, their behaviour does not to a very large extent influence the design of a cost-effective norm-production technology. If there is either only precedent or only statute, then interest group behaviour is the same. If the two technologies coexist and there are multiple interest groups, then some will use the courts and others the legislature. The only way in which the behaviour of interest groups could make a difference is if there is only one group who can extract rents yet there are two lawmakers. And even in this very esoteric scenario, the behaviour of the interest group can be modulated through rules that are quite independent of the choice of norm-production technology.

III. Applications

I propose now to demonstrate some of the policy implications which are latent in the theoretical analysis. I will focus on four areas of policy: controls on litigation, sunset clauses, experimental legislation, and lastly the comparison between the common law and the civil law.

1. Controls on Litigation

It is often said that litigation is socially wasteful. On the classical assumptions of economic theory, it should not occur at all – if party A expects to win and party B to lose, then they are always better-off settling.⁸² That the As and the Bs of the world do litigate is often seen as a problem. Policies are designed to keep the general populace out of the courts.⁸³ It is

⁸¹ See Landes & Posner (fn 1) on the benefits of countervailing power as between the legislature and the courts and Becker (fn 68) for the benefits of inter-group competition.

⁸² Some of the foundational papers on this subject are Landes, W., 'An Economic Analysis of the Courts' (1971) 14 JLE 61, Shavell, S., 'Suit, Settlement, and Trial: A Theoretical Analysis under Alternative Methods for the Allocation of Legal Costs' (1982) 11 JLS 55, Priest, G., 'Regulating the Content and Volume of Litigation: An Economic Analysis' (1982) 1 SCER 163.

⁸³ For example, there is in Europe, and especially in continental Europe a great deal of aversion to introducing conditional fee arrangements, contingency fees, third-party litigation financing (see Faure, M. & de Mot, 'Comparing Third-Party Financing of Litigation and Legal Expenses Insurance' (2012) 8 JLEP 743) and class actions (see Schaeffer, H., 'The Bundling of Similar Interests in Litigation. The Incentives for Class Action and Legal Actions Taken by Associations' (2000) 9 EJLE 183). This scepticism is not limited to Europe. Across the Atlantic it has been argued that legal complexity exists because lawyers have a vested interest in perpetuating social waste through litigation – see White, M., 'Legal Complexity and Lawyers' Benefit from Litigation' (1992) 12 IRLE 381, Rubin, P. & Bailey, M., 'The Role of Lawyers in Changing the Law' (1994) 23 JLS 807, Epstein, R., 'Intuition, Custom, and Protocol: How to Make Sound Decisions with Limited Knowledge' (2006) 2 NYUJLL 1. I should note that the point has not gone unnoticed in Europe either – see Dari-Mattiacci, G. & Deffains, B., 'Uncertainty of Law and the Legal Process' (2007) 163 JITE 627.

not my purpose here to say why private parties find it worth their while to litigate. What I wish to say instead is that litigation is not necessarily undesirable from a social standpoint. Investments in litigation generate a public good in the form of information. The legal system uses that information to produce law. And law is a good from which we all benefit.⁸⁴ If litigation is curbed, so is the ability of the courts to accumulate information and make norms. And since the courts are in some cases more effective than the legislature, the legal system ends up worse.

The point is best seen in the context of an actual proposal to curb litigation. I take that advanced by Professors Rosenberg and Shavell.⁸⁵ They discuss a rule such that half of all lawsuits brought before the courts are struck out by flipping a coin. In those that remain, damages are doubled. The law's deterrent effect is preserved while the aggregate cost of litigation is halved.

Let us now compare norm production in our world to norm production in a Rosenberg-Shavell world. First, by halving the total caseload, the policy would also halve the volume of information that the courts acquire. If twenty litigants wish to volunteer their brute-fact information for free, only ten will be allowed to do so. Secondly, the Rosenberg-Shavell rule caps the litigation rate at half the intensity of social demand for a new norm. Judge-made law would lag behind the times considerably.⁸⁶

Would a Rosenberg-Shavell rule make the legal system cheaper? Laws would become cheaper to apply but more expensive to make. The courts would acquire less information for free, and slower. The legislature would have to make up the shortfall, even when it is ineffective. The aggregate cost of information would increase. Whether there would be a saving turns on the delta between the savings in litigation costs and the increase in norm-production expenditure. The costs of parliamentary inquiries, the gathering of statistical information, the retention of experts, the funding of research and so on are to the legislature quite high.⁸⁷ Whether they are higher than those of litigation is ultimately a matter of empirics. Suffice to say for now that less litigation need not mean a cheaper, or better, legal order.

⁸⁴ Professor Shavell has made a similar point in the torts literature, although his point relates to the social desirability of deterrence rather than the social usefulness of precedent – see Shavell, S., 'The Social versus the Private Incentive to Bring Suit in a Costly Legal System' (1982) 11 JLS 333 and Shavell, S., 'The Fundamental Divergence between the Private and the Social Motive to Use the Legal System' (1997) 26 JLS 575.

⁸⁵ Rosenberg, D. & Shavell, S., 'A Simple Proposal to Halve Litigation Costs' (2005) 91 Virginia LR 1721. I take that proposal rather than another because it is easiest to demonstrate its effect – the point is I think easily extensible to ones that target more specific classes of litigant.

⁸⁶ It may be countered that the judiciary can multiply the number of cases before it by two and obtain a credible proxy of social demand. But since the rate at which judges would receive information would also be halved, to make laws on time they would have to make them with half of the information.

⁸⁷ Note, in addition, that the introduction of the policy would also double the costs to interest groups of litigating strategically – since a strategic claim would now face a risk of not being examined with a probability of 0.5. This does not, however, impact the cost-effectiveness of the system as a whole except in the very special case of a single interest group in a precedential system – under normal conditions, the interest group would simply direct its information to the legislature instead.

2. Sunset Clauses

I now move to sunset clauses. A sunset clause is a stipulation to the effect that a given norm will only be valid until a certain date unless renewed. Recall that the courts have an advantage when it comes to brute facts, but not necessarily when it comes to contingent facts. If there is no speed limit, it will be cheaper for a court to discover what the dangers of high-speed driving are. But it might be impossible for a court to determine the extent to which those dangers would be lessened if the speed limit were 50 km/h. That is the case when the cost of the information in question is higher than the value of the claim, as in the software example. A sunset clause converts contingent facts into brute ones⁸⁸. If it is said that the speed limit will be 50 km/h for a year, then during that year the consequences of a 50 km/h speed limit will manifest themselves. The courts will receive the information for free from litigants.⁸⁹ This is cheaper than having the legislature finance the production of contingent-fact predictions.

There are two important caveats here. Firstly, if the provisional norm is set inaccurately, that is, if 50 km/h does not set the optimal balance between speed and convenience, then costs accrue from both the error and from the fact that society does not obtain the norm it demands at the time at which it demands it. If the legislature can discover the correct speed limit right away by buying the software in question, the saving from fewer injuries might offset the added expenditure on information.

Secondly, sunset clauses, like all laws, are matters of public record. If it is known that a given law is only in force so that its consequences may be observed, then those affected may doctor the consequences.⁹⁰ If they do, the information that the lawmaker will receive will be false, that is, it will not be information at all.⁹¹ Much depends on the size and composition of the affected group. For example, the speed limit affects all citizens, and most do not feel very strongly about it. If it is set at 40 km/h for a year, we would not expect all, or at any rate many, drivers to be late for work purely to mislead the lawmaker. Nor would many pedestrians hurl themselves under passing cars to feign a spike in fatalities. Consider, in the alternative, measures that affect a small group of economic agents with a strong interest in the content of the law. For example, suppose that the lawmaker passes a norm that, for a year, imposes a large fine on air carriers who fail to reduce carbon emissions from their flights.⁹² If the air carriers can coordinate, one may expect them to increase prices dramatically. This is likely to dissuade the government from retaining the measure past the sunset.

⁸⁸ Strictly speaking, it merely ensures that the two categories overlap – if the speed limit now is 50 km/h, driving behaviour is contingent on there being a norm, so that it is an element of material reality and a consequence of a norm simultaneously.

⁸⁹ A similar point is made in Gersen, T., ‘Temporary Legislation’ (2007) 74 UCLR 248.

⁹⁰ *Ibid* 23 also notes that possibility.

⁹¹ If what we need to discover is how people would behave if the law were X and we in fact discover how people would behave if the law X *was being trialled*, then we effectively discover nothing.

⁹² Suppose for simplicity that those damages are uninsurable and that those carriers only operate within the polity, where they face no competition.

3. Third Parties in Litigation

I now want to say a few words about the involvement of third parties in litigation. By this I mean not joinder or funding but the practice of some courts to accept and consider submissions from parties other than the litigants. The third parties in question can be either private, as are *amici curiae* in America, or public, as are Advocates General in the Netherlands.⁹³

Let me begin with 'friends of the court'. Their involvement increases the volume of information transmitted to the courts in a single case. It may also signal the urgency with which a norm is needed in society. These advantages are particularly pronounced if the *amici* lack standing to partake in litigation of their own. For example, in *A v B* the *amici* might include an insurer, a haulier, a homeowners association, an environmentalist group, and so on. All of those hold norm-relevant information. If the courts do not accept *amicus* briefs, those parties would either be unable to transmit their information or they would only be able to transmit it later when they themselves litigate. We may for this reason say that a system of precedent-with-*amici-curiae* is better than a system based on precedent alone.

Recall, however, that the concern here is with comparing precedent to statute. Would a system of precedent-with-*amici-curiae* be better than a statutory one? The only parties whom we may reasonably expect to submit *amicus* briefs are interest groups: the rationally apathetic have no incentive to participate. But those interest groups would flock to the legislature under statute. Their behaviour would be the same under precedent-with-*amici-curiae* and under statute.

In a mixed system, some interest groups will lobby the legislature and others will litigate strategically before the courts. *Amicus* briefs reduce the cost of strategic litigation dramatically. They give interest groups a shot at rents without requiring them to litigate themselves. Consequently, we may expect the total volume of interest group activity before the courts to be higher if *amicus* briefs are allowed. But since some interest groups will find it worth their while to lobby the legislature as well, some of the relevant information will end up with parliamentarians and some with the courts. The two will have to coordinate. This is in fact the position without *amicus* briefs as well, so little is gained.

A state-appointed Advocate General can also cure some of the ills of judicial law-making. For example, he may be given the budgetary powers to fund the production of new information when its cost exceeds the value of a claim. However, as with *amici*, precedent-with-Advocate-Generals is superior to precedent without them, but it does not fare better than statute. If the courts can fund the production of information through the Advocate

⁹³ For an overview, see Larsen, A., 'The Trouble with Amicus Facts' (2014) 100 Virginia LR 1757. The civilian equivalents are covered in Kochevar, S., 'Amici Curiae in Civil Law Jurisdictions' (2013) 122 Yale LJ 1653. The theoretical issues are sketched out in Kearney, J., 'The Influence of Amicus Curiae Briefs on the Supreme Court' (2000) 148 UPLR 743, a paper which also studies them empirically. For an overview of the history of the *amicus curiae*, see Krislov, S., 'The Amicus Curiae Brief: From Friendship to Advocacy' (1965) 72 Yale LJ 694.

General and so can the legislature, then the two are the same. The advantage of the Advocate General is more evident in a system of precedent-and-statute, where he stands to considerably lessen the costs of coordination between the legislature and the courts. The Advocate General, being state-appointed, is likely to assist in the transmission of information that is available from the legislature to the courts.

This point can be taken further. If coordination between two lawmakers is sought, the participation of one in the workings of the other evidently helps. But there are limits on this argument's purchase, on grounds quite different from cost-effectiveness. For example, an even more effective way of coordinating statute and precedent would be to have judges sit in the legislature, or to have members of the legislature double up as judges.⁹⁴ This would, however, to a great extent undermine the impartiality, or at the very least the perception of impartiality, that the system is meant to achieve.

4. Common versus Civil Law

I lastly want to discuss the ongoing debate about the relative merits of Anglo-Saxon and civilian legal systems. I argued that a combination of precedent and statute is superior to using only one or only the other. This may on first impression imply that my analysis favours the common law – Anglo-Saxon systems combine judge-made law and statutes. To leave it at that would be superficial. Civilian lawyers also draw on court judgments. A German court, if presented with two identical sets of facts in succession, would not decide the two matters differently.⁹⁵ Since in my analysis precedent meant the general possibility of judges producing norms, a civilian system 'counts' as a precedent-and-statute one just as much as a common law one.⁹⁶ But I do not think civilian and common

⁹⁴ The role of the Advocate General is also not immune to challenge on substantive grounds. See, for example, *JJ v The Netherlands* (1998) 1988-II 604 and *KDB v The Netherlands* (1998) 1998-II 621, in which the rule that the parties could not reply to the opinion of the Dutch Advocate General was struck down as contravening the right to a fair trial. Likewise, in England the Lord Chancellor, a member of the Cabinet, would also sit as a judge in judicial proceedings. But human rights concerns led to the modification of that rule in the Constitutional Reform Act 2005. The same Act also removed judges from the upper chamber of the British Parliament.

⁹⁵ We may say that those systems are not truly precedential, in the sense that there is no obligation on courts to follow the decisions of previous courts, so that they will only follow previous decisions with a certain likelihood. But this would also be mendacious, since the doctrine of *stare decisis* permits a great many exceptions, so it would be wrong to say that Anglo-Saxon courts *always* consider themselves bound by their predecessors. At best, the difference is one of degree – it would probably be accurate to say that Anglo-Saxon courts follow previous decisions more often than civilian ones. I do not, however, know if this is true as an empirical matter. I think there are good reasons why it should be, but the difference may not be particularly significant – if civilian courts follow one another 99% of the time and common law ones 99.2% of the time, then the distinction would be somewhat devoid of practical significance.

⁹⁶ Does the cost-effectiveness of information-acquisition vary with the 'strength' of precedent? I think not. The judiciary acquires information through litigation, and not specifically for the purpose of norm production. If it produces norms more often, this just means that the input is converted into an output with greater frequency. But that frequency does not impact on the cost-effectiveness of the information acquisition procedure. To render this in a somewhat less abstract fashion, suppose that a piece of software is produced which shows that a speed reduction of 1 km/h results in 3 less deaths per day. Someone then sets the speed limit at 60 km/h. In a subsequent case, someone else decides that 60 km/h and produces a new norm at 50 km/h. No new information is generated between the two cases – it is merely the case that in the second a decision is made to process it differently from the way in which it was processed in the first. So that there is no increase in costs. One may argue that if the reduction in the second case occurs because the judge in the second case has a different

law systems are the same. Nor are the two equally cost-effective – if my analysis is correct, the civilians have a small advantage.

I will begin by explaining how the two systems differ. At common law, the courts will typically define the general principles of law and statute will only be used as a supplement, in order to either clarify their application, or to resolve ambiguities in legal doctrine, or to address technicalities. In law-and-economics parlance, if precedent dominates the courts make the standards and the legislature produces rules. Conversely, in a civilian system the legislature typically⁹⁷ produces the general principles and the courts render those principles more precise. For example, we may say of English contract law that its general principles, such as privity, are defined by the courts. Conversely, choices such as that between efficient breach and *pacta sunt servanda* were in France made by the legislature. In England, privity has been refined by statute, but it remains the case that the judges are masters of the principle's existence. In France, the exact circumstances in which specific performance will be granted are a matter for the courts – but only the legislature can decide that it is no longer primary.⁹⁸

purpose than the first judge, so that the effort expended by the second judge counts as a cost and therefore the process is more expensive. But recall that we are comparing here the costs of precedent and statute, so that if the second purpose-production exercise is to have an impact, it must be shown that the legislature would not re-examine its purposes as often as the courts. There is in fact no reason to suppose that the judiciary in even the 'most civilian' jurisdiction changes its mind more often than the corresponding legislature. Note, moreover, that the strength of *stare decisis* has no impact on the analysis of interest groups – see fn 76 above.

⁹⁷ It is important to emphasise that these characterisations are generalisations. I do not maintain that the common law courts always develop principles or that they only develop principles. Sometimes, they clarify principles found in statutes. There is for example a vast body of jurisprudence on the definition of 'employee' under the Employment Rights Act 1996. Equally, the civilian courts do not always clarify broad statutory principles. Sometimes, they generate principles of their own. The history of *culpa in contrahendo* in German law is one example. *Urgenda v The State of the Netherlands* (2005) C/09/456689 (24 June 2015) is another. The point that I make here is that it is *comparatively* more common to see civilian courts interpret statutory principles than it is to see common-law courts interpreting statutory principles and also that it is *comparatively* more common to see common-law statutes clarifying judge-made principles than it is to see civil-law statutes clarifying judge-made principles. Like any theoretical argument, mine rests on a generalisation. That generalisation is only useful if the reader believes that it captures more of reality than it omits. Of course, the degree to which the two systems differ may in practice be very small: see Zweigert, K. & Kötz, H., *An Introduction to Comparative Law* (3rd edn, Clarendon 1998); Zweigert, K., 'Methodological Problems in Comparative Law' (1972) 7 *Israel LR* 465; Zweigert, K., 'Possibilities of Comparing Analogous Institutions of Law in Different Social Systems' (1973) 15 *Acta Juridica Academiae Scientiarum Hungaricae* 107. If the difference is very small, then the same is very likely to be true of its consequences. As will be seen shortly, the conclusion that I draw from the generalisation reflects this – though the civil law might be marginally more cost-effective, there is no reason to think that its advantage is categorical or even very large.

⁹⁸ This is, strictly speaking, an altitudinal conception of the common-civil law divide. We may also think of it latitudinally. In any precedent-and-statute system, there are areas which are dominated by the judiciary and areas dominated by statute. For example, we may say that in England, a common law system, the laws of property and contract are generally produced by the courts, and that tax law and employment law are dominated by statute. We may equally say that in France, a civilian system, contract law is codified but administrative law is mostly produced by the Conseil d'Etat. On this latitudinal conception, a common law system is one in which more areas of law are dominated by the judiciary and a civilian legal system is one in which more laws are produced by the legislature. I do not think this is very helpful. For example, there are contract law statutes in England (see for example Contracts (Rights of Third Parties) Act 1999 or Unfair Contract Terms Act 1977) and administrative law statutes in France (see Code of Administrative Justice 2013). There are also court-

Why, then, did I say that the civilians have a small advantage? If I am right, the common law is characterised by there being more areas in which general principles are determined by the courts than by the legislature. Those general principles are essentially identical to what I earlier called purposes: to choose between *pacta sunt servanda* and efficient breach is to choose between efficiency and fairness, co-operation and paternalism, and so on and so forth.⁹⁹ Likewise, to choose between having a doctrine of consideration and not having one is a matter of one's personal disposition to the institute of promising. By assigning more of these choices to the courts, common law systems make the process of generating them more costly.¹⁰⁰ It is cheaper for the legislature to choose between *pacta sunt servanda* and efficient breach than it is for the courts to make the same choice. Thus if all other things are equal, a civilian system will be more cost-effective.

Lastly, why is this advantage small? Firstly, the list of other things which may be presumed equal is quite large: in both common and civil law jurisdictions, the courts gather brute fact information. In both France and England, the legislature funds the production of expensive contingent fact information. And the two institutions coordinate with one another everywhere.

Secondly, the purpose-related advantage of the civilians manifests itself only rarely. Recall that the courts' disadvantage in purpose terms comes from the fact that members of the judiciary will be reluctant to disclose their ideological preferences to one another. This means that new purposes will be difficult to produce. But it also means that once a purpose is produced, it will be difficult to deviate from it. Consequently, the cost-ineffectiveness problem will only arise when the purposes behind the old law have been discredited, or when an entirely new social phenomenon has to be regulated and purposes designed anew. In all other instances, we may expect that old purposes will be sufficient to guide the judiciary in designing lower-order norms.

Thus it emerges, in the last analysis, that in cost effectiveness terms there are good reasons to think that a civilian system may have an advantage over a statutory one. Now,

developed principles in French contract law (see for example the principles that govern the availability of specific performance for breach of contract –Dawson, J., 'Specific Performance in France and Germany' (1959) 57 Michigan LR 495 is an excellent overview. A more technical and detailed exposition which is accessible to the Anglophone reader may be found in Rowan, S., *Remedies for Breach of Contract: A Comparative Analysis of the Protection of Performance* (2012 OUP). And there are court-developed rules in English tax law (e.g. *Chenney v Conn (Inspector of Taxes)* [1968] 1 WLR 242). How, then, may we say that the law in one field is predominantly statutory or predominantly precedential? Volume is clearly not a very good proxy, for a short text may have a much greater influence on the law than a very detailed ordinance. Nor can we realistically count the number of cases decided on one type of rule or another – the statutory provision and the judge-made rule usually operate in concert.

⁹⁹ This is not the place to summarise that debate. The reader is referred, among others, to Shiffrin, S., 'The Divergence of Contract and Promise' (2007) 120 Harvard LR 708, Campbell, D., & Harris, D., 'In Defence of Breach' (2002) 22 LS 208, Shavell, S., 'Is Breach of Contract Immoral?' (2006) 56 Emory LJ 439, Friedmann, D., 'The Efficient Breach Fallacy' (1989) 18 JLS 1.

¹⁰⁰ if we take time as a very inexact proxy, it took the drafters of the Napoleonic Code five years to arrive at a set of general principles, whereas the design of the English law of contract took the judges the greater part of Victoria's reign.

to suggest that this means that the common law is on the whole inefficient would be a step too far, for it would also need to be shown that the purposes that judges in fact choose are superior to those selected by the legislatures. Whether this is in fact true is a question which the present analytical framework is ill-equipped to tackle.

IV. Conclusion

I will now try to bind the disparate trends of this essay together in as succinct a fashion as I can. I set out to schematise the mechanisms by which courts and legislatures acquire information, and to compare their cost-effectiveness. The enterprise, more broadly, had as its end the re-examination of a very old and lustrous Austrian argument. The result is in hue the same but different in its maculation. As originally thought, the courts are more effective than the legislature in the ordinary case of information that is dispersed among members of the polity. The legislature, however, is superior in the rarer instances in which new information has to be generated purely for the purpose of norm production, and also when the purpose of the norm production exercise is costly to define. Moreover, the courts' advantage is absolute only when there are no material impediments to litigation. Otherwise, the rate at which they accumulate information falls behind the value which society attributes to the timely promulgation of a norm. Finally, even though the courts are ordinarily best-placed to gather information, the legislature is better at deciding whether conditions are ordinary or not.

In our modern systems of justice, the two technologies operate in tandem. Consequently, their respective disadvantages are far less pronounced than they otherwise would be. This however comes at a cost of coordination: information must be funnelled from judges to parliamentarians and vice versa. The allocation of lawmaking competences thus continues to matter. By matching parts of norm production to the most effective technology from the outset, we economise on coordination. In this respect, the civilian tendency to leave the production of purposes to the legislature gives those systems a small edge – but no more than that.

There are also some auxiliary points which might be worth considering. Firstly, any attempt to curb the propensity of the public to litigate also reduces the ability of the courts to gather information cheaply. If the legislature has to step in and the norm in question is one to which the courts are better suited, the result is ineffectiveness. That may well offset the savings on legal costs. Secondly, the operation of interest groups turns out to matter little, as far as cost-effectiveness is concerned. They would behave the same if the legal system were exclusively precedential or exclusively statutory. And if it is mixed as ours are, some interest groups funnel their information to the courts and their competitors seek to challenge them in the legislature, or vice versa. In either case, to use all of the available information we must incur the cost of coordinating the two.

I close on a note of circumspection. Even if everything that I have said here is correct, it only relates to cost-effectiveness and not to efficiency, or fairness, or any other property with which we may wish to vest our laws. That a law is cheap to make in a court and more expensive in a legislature, or vice versa, does not say anything about the tendencies which

laws produced there will generally exhibit. On that point I must for now remain neutral. But so far as the cost of norm production partly determines the aggregate efficiency of our legal systems, I am hopeful that the preceding pages add a little to the understanding of that problem.

Chapter IX

PRECEDENT IN THE CIVIL AND COMMON LAW

We associate precedent with the common law and statute with the civil.¹ That is in actuality an approximation, and a rough one at that. There are many statutes in England. Courts in continental Europe cite cases. The common law is part-statutory. The civil law is part-precedential. I said that statute under some conditions has advantages over precedent. This does not seamlessly translate into a parallel advantage for the civil law over the common. Instead of that translation I offer here an application of my theory to some real legal systems, both civil and common. I will compare precedent in Germany, France, Italy, and England.

I think what emerges might excite moderate practical and theoretical interest. Firstly, there is a trade-off between hierarchic and applicative certainty. French and Italian law are the most applicatively uncertain and also the most hierarchically certain. English law, obversely, is the most applicatively certain but also the least hierarchically certain.

Secondly, information costs are in each jurisdiction managed differently. In France and Italy, the courts do not report brute- and contingent- fact information, a diseconomy. They also do not produce purposes, which is an economy. In England, the courts do report facts, but they also produce purposes – again a suboptimal arrangement. And in Germany, they generally report facts without producing purposes – the solution there closely mirrors the first best.

Thirdly, different attitudes to hierarchic uncertainty explain cross-system variance in the stringency of *certiorari*. In France and Italy, the cassatory courts entertain many more actions than do their English counterparts. That is so because in England, hierarchic uncertainty is managed by limiting access to the highest court. If there is less litigation before it, it can produce fewer laws, so fewer of its laws overlap. In France and Italy, on the other hand, hierarchic uncertainty is managed through restrictions on the content of judgments. The highest courts in those jurisdictions can entertain more appeals without causing the law to grow more uncertain.

In Part I, I deal with three preliminary matters – the inevitability of precedent, its structure, and the attendant trade-offs. In Part II, I describe the system of precedent in France, Germany, Italy, and England. In Part III, I rank the four systems in terms of information costs and uncertainty. Part IV develops some explanations and implications. Part V concludes.

¹ See on this point Dainow, J., 'The Civil and the Common Law: Some Points of Comparison' (1966) 15 AJCL 419 and Algero, M., 'The Sources of Law and the Value of Precedent: A Comparative and Empirical Study of a Civil Law State in a Common Law Nation' (2005) 65 Louisiana LR 776.. For an example of the way in which statute is used interchangeably with 'civil law' and precedent with 'common law', see Rizzo, M., 'The Mirage of Efficiency' (1980) 8 Hofstra LR 641, Rubin, H., 'Why is the Common Law Efficient?' (1977) 6 JLS 51, Zywicki, T., 'The Rise and Fall of Efficiency in the Common Law' (2003) 97 NULR 1551.

I. Preliminary Matters

1. Inevitability of Precedent

I want to begin by establishing that as a matter of logic – both economic and common – all legal systems must use precedent. That explains why we see it even in countries where it is expressly outlawed. What makes precedent inevitable?² Recall the analogy between the legal system and a market: judges supply adjudication and litigants demand it. Let us first suppose that there is a system in which it is possible, but not mandatory, for judges to follow past judgments. There are incentives to adopt precedent on both the supply- and the demand- side of that ‘market’. Firstly, the resolution of legal controversies is to judges laborious. If a judge is asked to determine whether ‘negligent’ means ‘failing to administer muscle relaxant before an electroshock’³, he must interpret the word negligent and measure it against the facts he is given. To do that, he must familiarise himself with, among others, expert testimony on the likely impact of electroshocks and patient testimony on the discomfort that they cause when administered. That testimony might be contradictory, so the judge also has to weigh the evidence put before him. Those steps, whose list is by no means exhaustive, may all be expected to tax the judge’s mental faculties quite considerably. This in turn gives the judge an incentive, where it is possible, to economise on effort.

Suppose now that the judge in the example, having gone through each step assiduously, decides that ‘negligent’ does mean ‘failing to administer muscle relaxant before an electroshock’, and finds for the claimant. Later, another claimant who was subjected to an electroshock sues and that suit is now before a second judge. The second judge, unlike the first, has a choice. He may conduct the investigation *de novo*, interpret ‘negligence’ for himself, consult expert and patient testimony, and weigh that to discover what he believes is the soundest interpretation of ‘negligence’, which he must then apply to the facts and announce an outcome. Alternatively, the second judge may take the reasoning of the first and apply it to the case before him. The latter option allows the second judge to economise on effort. In the long run, then, we would expect many judges to follow previous judgments, even if they are not obliged to do so.

This argument is neither plenary nor unassailable. For example, the second judge might feel more strongly about protecting doctors than the first, and therefore wish to reach a

² There is a theory to the effect that the use of precedent, in the broader sense of that term, is inevitable in any concerted human pursuit – see Lewis, D., *Convention: A Philosophical Study* (HUP 1966) at 36ff in particular. The point is also latent in Pound, R., ‘The Theory of Judicial Decision: The Materials of Judicial Discretion’ (1923) 36 Harvard LR 641, 648-50 and explicit in Maccormick, N., *Rhetoric and the Rule of Law: A Theory of Legal Reasoning* (CUP 2005) 144ff. There is also an economic theory, highly persuasive, that informational economies will drive members of groups to follow one another: see Bikchandani, S. et al, ‘A Theory of Fads, Fashion, Custom and Cultural Change as Informational Cascades’ (1992) 100 JPE 992. In law and economics, there are an analogous argument to the effect that rational judges would always favour precedent: see Harnay, S. & Marciano, A., ‘Judicial Conformity versus Dissidence: An Economic Analysis of Judicial Precedent’ (2004) 23 IRLE 405, Talley, E., ‘Precedential Cascades: An Appraisal’ (1999) 73 SCLR 87, Daughety, A. & Reinganum, J., ‘Stampede to Judgment: Persuasive Influence and Herding Behavior by Courts’ (1999) 1 ALER 158, Bueno de Mesquita, E. & Stephenson, M., ‘Informative Precedent and Intrajudicial Communication’ (2002) 96 APSR 755.

³ I base the facts (though not the outcome) on *Bolam v Friern Hospital Management* [1957] 1 WLR 582

different outcome.⁴ There is, however, another supply-side incentive which may impel him to use the material developed by the first judge. Following Posner⁵, we may assume that judges gain utility from acceptance by the wider juridical community, and also that they suffer a disutility when they are reversed.⁶ One way in which a judge can conform to the expectations of the juridical community is by following the reasoning adopted by other members of that community.⁷ If this right, then even if the second judge does not agree with the logic or ideology of the first, he still has an incentive to follow him. The same reasoning applies to the incentive to avoid the disutility from reversal. The appellate courts are unlikely to disturb a judgment which conforms with their own settled practice. A reversal-averse judge would be well-advised to observe precedent – even if the system does not force him to do so.

There are also incentives for litigants to favour precedent. Firstly, the public prefer like cases to be decided alike. Unlike outcomes to like cases make the law uncertain, and most individuals are averse to uncertainty. In the language that I used earlier, without precedent applicative certainty is lower: if in every case we have to decide what ‘negligent’ means from scratch, then outcomes will be unpredictable *ex ante*.⁸ Since private parties generally want to be able to organise their conduct around some expectation of what the courts will do if faced with such-and-such facts, we might expect them to prefer for judges to follow one another even if they are not bound to.

Secondly, if a judge deviates from precedent, parties are much more likely to appeal his finding than if he does not. Even if we assume, contrary to what I said previously, that appellate courts are as likely to affirm a deviating judgment as a conforming one, the probability that deviating judgments will be appealed is higher. And if more deviating judgments are appealed, more are likely to be reversed. And whenever a deviating judgment is reversed, the appellate court reinstates the position that would have obtained under precedent. This mechanism works to keep the system precedential – even if the judiciary do nothing to make it so.⁹

⁴ The point is considered in, among others, Gennaioli, N. & Schleifer, A., ‘The Evolution of Common Law’ (2007) 115 JPE 43, Vermeulen, A., *Law and the Limits of Reason* (2008 OUP), Miceli, T., ‘Selective Litigation, Judicial Bias, and Precedent’ (2008) 38 JLS 157, and Fernandez, P & Ponzetto, G, ‘Stare Decisis: Rhetoric and Substance’ (2012) 28 JLEO 313. For a summary of that literature, see Chapter 2.

⁵ Posner, R., ‘What Do Judges and Justices Maximise? (The Same Thing Everybody Else Does)’ (1993) 3 SCER 1

⁶ It is also sometimes said that reversal jeopardises a judge’s promotion chances – though apparently there is no empirical relationship of this kind: see Higgins, R. & Rubin, P., ‘Judicial Discretion’ (1980) 9 JLS 129. Judge Posner maintains that even if this is true, judges are still highly reversal-averse: Posner, R., *How Judges Think* (2010 HUP) 141ff.

⁷ The point is made in Rizzo, M., ‘Which Kind of Legal Order? Logical Coherence and Praxeological Coherence’ (1999) 4 JEEH 497

⁸ See on this point Kaplow, L., ‘Rules versus Standards: an Economic Analysis’ (1992) 42 Duke LJ 557, especially 614ff.

⁹ The argument is essentially an adaptation of that in Rubin, H., ‘Why is the Common Law Efficient?’ (1977) 6 JLS 51, summarised in Chapter 2, only my focus here is not on substantive laws but rather on a metalaw to the effect that judges should follow precedent. The likelihood of a judge following that metalaw having his finding appealed, and then reversed, is lower than for a judge who does not follow the metalaw. Consequently, even if judges have no particular preference for that metalaw, it is likely to have brighter survival prospects than its rivals.

In this fashion, supply and demand push legal systems to precedent. But even if judges and litigants both favour precedent, there might be good reasons for the designer of the legal system to want to have some, or even all, cases decided *de novo*. Firstly, that designer is usually a legislature. Parliament might not want to allow judges to make laws because of their relative democratic illegitimacy.¹⁰ Or the lawmaker might think precedent inefficient, for example because it is path dependent.¹¹

The measures that the lawmaker would have to adopt to eliminate precedent are prohibitively costly. In my example, he would need to ensure that the second judge cannot access the opinion of the first. To do this, he would have to make all judges work in complete isolation. He would also have to ensure that judgments are unreasoned, lest litigants circulate them through argument. In practice, this would violate rule-of-law constraints: judgments would have to be anonymous, unappealable, and purely dispositive. Moreover, in outlawing precedent, the lawmaker would forego considerable information cost economies. Judges, who as I showed receive information for free from litigants, would be forbidden from reporting that information either to one another or to the legislature – as I showed in Chapter 8, this would be cost-ineffective.

In short, precedent is a labour-saving tool to judges and a guarantee of certainty to litigants. That is not to say that it is perfect – it might empower unelected judges too much, or it might make the system too path dependent. But the costs of abolishing precedent are prohibitively high, so judges follow one another in all jurisdictions.

2. The Structure of Precedent

That precedent is inevitable in any legal system does not mean that precedent must be the same in all legal systems. There might be, and we shall see there in fact are, systemic cross-system differences in the treatment of past judgments. It is easy to conceive of the causes of that divergency – there might be metalaws that constrain the permissible uses of precedent or some judgments may go unreported. I will discuss the position in each of the four jurisdictions that I discuss here shortly. What I want to do beforehand is posit four dimensions on which precedential systems might differ in general.

First, the use of precedent is conditioned by the general form which legal judgments take. For example, if it is the practice of courts in some polity to issue very short judgments which note the relevant legal provisions and then record the outcome, judges in that polity will find precedent to be of assistance only rarely. If it is the practice of the courts in another polity to spell out each step in their analysis and to record their whole

¹⁰ That was certainly Napoleon's motivation when he drafted the code – for the politics of the *Code civil*, see Gordley, J., 'Myths of the French Civil Code' (1994) 42 AJCL 459

¹¹ If the first judge finds that it is not negligent to administer electroshocks without muscle relaxant and all others follow him, say because they want to economise on information, this might turn out inefficient. For example, it might be that failure to administer muscle relaxant causes death and that requiring doctors to administer muscle relaxant is very inexpensive. If the initial finding is never reconsidered, the legal system might lock onto an inefficient path. See further Hathaway, O., 'Path Dependence in the Law: The Course and Pattern of Change in a Common Law System' (2001) 86 Iowa LR 2001, Jois, G., 'Stare Decisis is Cognitive Error' (2009) 75 Brooklyn LR 63 and Fon et al, 'Litigation, Judicial Path-Dependence, and Legal Change' (2005) 20 EJLE 43.

interpretation of the evidence and to make explicit their weighing of the relevant policy goals, the judiciary will find precedent useful often.¹²

Second, different *parts* of past judgments might constitute precedential law. We saw in the discussion of English precedent in Chapter 4 that findings of fact are not binding: one English judge may interpret the evidence before him in one way. Another, faced with the same evidence, is free to arrive at the opposite conclusion. Similar restrictions exist in other jurisdictions as well. And they can evidently make a difference to the general functioning of precedent.¹³

Third, there might be difference as to *whose* judgments constitute precedent. For example, in Germany the judgments of the *Bundesverfassungsgericht* are binding on all organs of the state,¹⁴ but those of other courts are not, at least formally. This can impact the use of precedent in two ways. By limiting precedential law-making to only a few courts, the system may limit the general usefulness of precedent.¹⁵ But if there are conflicting judgments between two courts, designating one as having precedential force may facilitate the use of precedent.¹⁶

Fourth, and last, there might be limitations on the right to appeal. This impacts precedent indirectly, but as we shall see in a very important way. The point, in brief, is this: if only judgments of the Supreme Court can constitute precedent, then fetters on the right to appeal to that court reduce the volume of legal materials that can be used by future courts.¹⁷ Applicative uncertainty increases, but hierarchic uncertainty decreases.

¹² To give an example, in the muscle relaxant case, suppose that the court simply states that ‘it is negligent to administer muscle relaxant before an electroshock, therefore the claimant wins’. In the next case, someone sues because they were not anaesthetised before a wisdom tooth extraction. The second court can find little guidance in the judgment of the first – it is unclear whether one is only negligent if they fail to administer muscle relaxant before electric shocks, or whether there is always liability for failure to mitigate pain, or whether the first finding only applies to shock therapy but not to dentistry, or vice versa. Conversely, if the first court explains that the negligence finding by saying that ‘negligence means to cause unnecessary pain, including in the course of a medical operation, and testimony shows that muscle relaxant can reduce pain without any side-effects’, then the court in the wisdom tooth case will find it much easier to use that finding. It will know that the causing of unnecessary pain is what is negligent, that the finding applies to all kinds of medical procedures, and it will also know that it needs to consider medical evidence of the side-effects of anaesthesia. There are fewer issues to consider anew.

¹³ For example, under the English rule that I just adverted to, if two cases concerning muscle relaxant and electroshock come before the same judge, the first might say that the defendant did not suffer unnecessarily, say because he believes medical testimony to the effect that muscle relaxant has undesirable side effects. The second, faced with the same medical testimony, might come to the opposite conclusion, say because he lends more credence to medical testimony adduced by the claimant, to the effect that muscle relaxant is harmless.

¹⁴ Section 31(2) *Bundesverfassungsgerichtsgesetz*

¹⁵ If the judgment in the muscle relaxant case comes from a court which does not produce precedent, the judge in the wisdom tooth case cannot take it into account.

¹⁶ If the High Court says that failure to administer relaxant is negligent but the Supreme Court says that it is not, then the judge in the wisdom tooth case, if instructed that only the Supreme Court can produce precedent, knows where to look for guidance.

¹⁷ If, for example, the muscle relaxant claimant loses and is denied leave to appeal to the Supreme Court, then the judge in the wisdom tooth case has to decide the matter before him *de novo*. If, on the other hand, the claimant in the muscle relaxant case has an *automatic* right to appeal to the Supreme Court, then by the time the wisdom tooth case comes to be decided, it is likely that the judge there will have a body of previous judgments to consider. An unfettered right to appeal increases the use of precedent.

3. Trade-Offs

To recapitulate, there are four dimensions on which a system of precedent may differ. These are: (1) the content of judgments, (2) the derivation method; (3) the courts of precedent; (4) fetters on the right to appeal. Different choices on those dimensions have implications for the cost of information and the types of uncertainty I discussed previously. I will now attempt to describe those implications in general.

Limits on the content of judgments generate information cost diseconomies and increase applicative uncertainty. They also have an upside, in that they lower hierarchic uncertainty. The information cost diseconomy arises thus: if courts do not report the entire adjudicative process, then they fail to disseminate some of the information that they acquire through litigation. In Chapter 8, I discussed a hypothetical nuisance case in which the claimant alleges that high-speed driving imperils his children and the defendant contends that he needs to drive quickly to do his job. Both kinds of information are germane to the setting of a speed limit. And the courts receive the information ‘for free’ – the parties transmit it to the judge to have their dispute solved. If the courts are forbidden from reporting the parties’ assertions, or from summarising the evidence, or if it is simply not their practice to include such details in their judgments, then that information does not become available to other lawmakers. Consequently, if the legislature or another judge wishes to produce a speed limit, they would have to acquire the same information anew and at a positive cost. This duplication is an information cost diseconomy.

Applicative uncertainty is also adversely effected by limits on the content of judgments. If the judiciary report fewer of the reasons for a decision, then there are fewer factors on which parties can base their predictions of the outcomes of future cases.¹⁸ On the other hand, limiting the content of judgments curtails hierarchic uncertainty. Hierarchic uncertainty arises when new laws are produced and they overlap with the old. If the courts do not describe their reasoning at length, then the likelihood that the reasoning will contain a new law is reduced.¹⁹ This halts the growth of legal complexity, and with it that of hierarchic uncertainty.

The choice of derivation technique strikes a trade-off, namely that between applicative and hierarchic certainty. If all parts of a judgment bind future courts, then the system becomes more applicatively certain.²⁰ However, such a provision is also likely to increase

¹⁸ For example, if the court simply states that ‘failure to administer muscle relaxant is negligent’, then it is difficult to predict a case in which someone fails to administer anaesthesia before a wisdom tooth extraction. Since we do not know what the explanation for the first holding is, we also do not know whether that explanation is valid in the second case.

¹⁹ If the judge simply states that ‘it is negligent to fail to administer muscle relaxant, therefore the defendant is liable’, he is not creating a law – he is merely applying it. But if he elaborates on his reasoning, and says, ‘it is negligent to cause pain to another needlessly, and therefore it is negligent to fail to administer muscle relaxant’, then there is a new law in operation – negligence is extended to cover cases in which pain is caused needlessly.

²⁰ For example, we may say that once the judge finds for the muscle relaxant claimant, it is known that negligence is triggered whenever pain can be avoided but is not – this extends not only to medical cases but also to ones of parents castigating their children. One judgment allows us to clarify the meaning of negligence in many contexts – the law becomes more applicatively certain.

hierarchical certainty.²¹ The larger the part of the judgment that can bind future courts, the higher the probability that any one judgment will contain a new law, and the more rapid the increase in legal complexity and hierarchical uncertainty.

The designation of courts of precedent works similarly: if more courts can generate laws, applicative certainty increases but hierarchical certainty decreases. For example, if only Supreme Court judgments are binding, then there will be fewer laws in general, and therefore it will be harder to make predictions about the outcomes of cases.²² If all courts can generate precedent, then there will be no shortage of factors on which to base predictions. But the many laws that the courts will generate will frequently overlap.²³

Lastly, fetters on the right to appeal, if combined with designated courts of precedent, decrease hierarchical uncertainty. If only the Supreme Court is permitted to make law, then the number of laws that will be produced by the judiciary is a function of the volume of Supreme Court litigation. And since hierarchical uncertainty depends on the number of laws the judges produce, the stricter the doctrine of *certiorari*, the lower the hierarchical uncertainty of that system.

So far, I have said that the use of precedent in any system is inevitable. And even if there are compelling reasons to restrict its use, a complete ban would be implausible. That is not to say that the structure of precedent is uniform across polities. The permissible content of judgments may differ, as may the permissible derivation techniques, the designated courts of precedent, and the applicable fetters on the right to appeal. These differences in turn have implications for the trade-offs between information costs, applicative and hierarchical uncertainty – a gain in one tends to come at a sacrifice of another. These foundations now in place, I move to describe four systems of precedent.

II. Precedent in France, Italy, Germany, and England

I should say at the outset that what follows must be treated with circumspection - I can only claim to be familiar with English law. The rest of my descriptions are based on secondary sources. There are many risks in comparing national laws in this fashion²⁴. I have sought to minimise them by considering an assortment of authors from the national jurisdictions in question and by restricting myself to points which they all find uncontroversial.

²¹ For example, there might be another case in which a prisoner is denied the right to a television in his room. If, then, the case of parents castigating their child comes to be tried, we would not know which law to apply – the prisoner case states that rights can be limited for the purpose of punishment, but the muscle relaxant case states that needless pain should be avoided. One points to liability for parents who castigate their children, the other to non-liability. If the derivation technique were different – say if it said that only those parts of a holdings which are material to a dispute are binding – the position would be different. We would be able to say that the negligence finding applies to medical procedures, and that the prisoner holding to the law of prisoner rights. Since there would then be no law to cover parents castigating their children, applicative uncertainty would be higher. But there would be no hierarchical uncertainty.

²² Before a muscle relaxant case is decided by the Supreme Court, it would be difficult to predict how other muscle relaxant cases would be decided.

²³ For example, one court might say that the infliction of unnecessary pain is negligent, and another might say that parents have an unfettered right to castigate their children. Were a case in which parents inflict unnecessary pain on their child to come to be litigated, there would be two laws pointing in opposite directions.

²⁴ See for example Legrand, P., 'European Legal Systems are Not Converging' (1996) 45 ICLQ 52.

1. France

(1) Content

The French courts write extremely short opinions. For example, a judgment in which the *Cour de Cassation* refused to grant adoption rights to homosexuals was 481 words long, a little more than a page.²⁵ The same court's refusal to allow an adoption if it would not be recognised in the child's country of domicile was condensed into 274 words.²⁶

The style of the French courts is highly syllogistic. By this I mean that the application of law to facts is taken to be an exercise in formal logic.²⁷ Since in France there exists a presumption that the judiciary do not create law, there is no discussion of policy.

The judgments of courts below the *Cour de Cassation* are usually not published. In cassatory judgments, the description of the facts is very brief. In the two judgments to which I referred earlier, which are by no means exceptional, the facts are summarised in a single paragraph.²⁸

(2) Derivation

Precedent is technically illegal in France – Article 5 of the *Code Civil* prohibits judges from applying anything other than the law, where the law means the Code.²⁹ A judgment which cites only precedent in its justificatory part is guaranteed to be reversed on appeal.

I argued earlier that any attempt to outlaw precedent is likely to fail. In France, the courts follow one another in practice. There are two aspects of French precedent which merit special attention. Firstly, for a holding to be considered binding, it must have been reached independently by a number of courts. That is what the French call 'constant jurisprudence'.³⁰ The exact number of repetitions necessary for some holding to establish itself as constant jurisprudence is unclear³¹ - I restrict myself to saying that that number is higher than one.

Secondly, French law knows no equivalent to the English category of 'mixed issues'.³² Whether an assertion of fact is proven or unproven is for the lower courts to decide, but the interpretation of the facts thus established – that is, the application of law to fact – is strictly a matter of law and within the purview of appellate review. Thus, although there is a fact-law distinction, the bifurcation metalaw classifies all ambiguous issues as legal – it is a metarule rather than the metastandard which we see in England.

²⁵ Case 09-12.623 (2010)

²⁶ Case 05-10.299 (2006)

²⁷ Troper, M. & Grzegorzczak, C., 'Precedent in France' in McCormick, N. & Summers, R. (eds), *Interpreting Precedents: A Comparative Study* (Dartmouth 1998) 107

²⁸ This of course has to do with the fact that the highest court in France does not try facts – the analysis of the evidence is conducted by the lower courts, who then ask the *Cour de Cassation* for guidance on points of law.

²⁹ See further Troper & Grzegorzczak (n 27) 115.

³⁰ To refer back to the example above, if one court in France holds that failure to administer muscle relaxant is negligent, then that finding would not be sufficient to ground an identical one in the next case. If, however, in the next case it is again found that muscle relaxant should be administered, then it becomes likelier that subsequent courts will treat such holdings as binding.

³¹ Troper & Grzegorzczak (n 27) 122

³² *Ibid* 104

(3) Courts of Precedent

Precedent being technically illegal, there is no formal designation of courts of precedent. The *Cour de Cassation* can generate precedent through its constant jurisprudence.³³ Courts at the lower levels appear to generate no binding law – since their judgments are not reported, it would be difficult to find out what their constant jurisprudence is.

It should further be pointed out that French administrative law, which is not covered by the *Code Civil* and its prohibition on precedent, is almost entirely judge-made. There being no Administrative Code, the general principles originate from decisions of the *Conseil d'Etat*.³⁴ Likewise, the French *Conseil Constitutionnel* has elaborated a great many constitutional principles, which together form the 'fundamental principles recognised by the laws of the French Republic'. The phrase originates from the Constitution, but the concrete principles, such as freedom of association and individual liberty, have been developed through litigation.³⁵

(4) Fetters on Right to Appeal

There are no substantive fetters on the right to appeal in France – the *Cour de Cassation* reviewed 21,777 civil cases in 2016.³⁶

2. Italy

(1) Content

Italian judgments are like French ones, in that they are short and syllogistic.³⁷ For example, a judgment which established that asylum seekers should be provided with information and a translator at the point of entering Italy is 575 words³⁸ in length. Another judgment, in which it was said asylum decisions should be based on information about the country of origin rather than the credibility of the applicant, runs to 1,135.³⁹

In Italy, unlike in France, there is a special institute called the *Ufficio del Massimario*, which is tasked with the publication of 'maxims'. Those maxims are summaries of the jurisprudence of the higher courts. It is those maxims, rather than the judgments themselves, that are used as precedent.⁴⁰

The maxims are intended to condense the judgments of the *Corte di Cassazione* to their briefest possible formulation. There is no explanatory material – the maxim is kept as general as possible. Nor is any reference made to facts.

³³ Ibid 119

³⁴ Troper & Grzegorzcyk (n 27) 113-4

³⁵ See CC Case 71-44DC (1971) and CC Case 76-75DC (1976), respectively.

³⁶ Cour de Cassation, 'Statistiques 2016' <<<https://www.courdecassation.fr/IMG///Statistiques%202016.pdf>>> accessed 23 November 2017

³⁷ Taruffo, M. & La Torre, M., 'Precedent in Italy' in McCormick & Summers (n 27)

³⁸ CC Case No 5925/2015 (2015)

³⁹ CC Case No RG 717/2010 (2010)

⁴⁰ Taruffo & La Torre (n 37) 148-9

(2) Derivation

Derivation in Italy is the task of the *Ufficio del Massimario*. The fact-law distinction, which as we saw is problematic in England, is avoided because facts are not reported. This precludes all analogic reasoning.⁴¹

It should also be noted that Italy formally employs a doctrine of constant jurisprudence, similar to the one used in France. If a holding is to be elevated to the status of precedent, it must have been repeated several times. And, as one authority notes, the more a holding is used, the greater its precedential value.⁴² But Italian constant jurisprudence works in a slightly different way from its French counterpart, again due to the *massimario*. Since judgments are generally unreported, whether a line of cases qualifies as constant jurisprudence depends not on the individual view of a judge tasked with solving a case, but rather on the collective view of the *Ufficio del Massimario*.⁴³

(3) Courts of Precedent

The *massimario* only includes decisions by the *Corte di Cassazione*. Since other judgments are unreported, they cannot constitute binding precedent. Even among the cassatory court's judgments, not all are binding – only those chosen to form maxims can bind future judges. Lower-court judgments are of importance to the doctrine of constant jurisprudence. Decisions by the appellate courts can constitute part of a line of precedent. But it is worth noting that they cannot start one – a binding line of judgments must always run from the highest court.

(4) Fetters on Appeals

Like in France, there are no fetters on the right to appeal in Italy. In 2015, the civil division of the *Corte di Cassazione* reached 26,199 definite judgments – a number similar to that observed in France.⁴⁴

3. Germany

(1) Content

Section 313(1) of the *Zivilprozessordnung* stipulates that judgments must contain the names of the parties, the name of the court, the day on which trial ended, the facts, and the reasons on which the outcome was based. German judgments are considerably longer than Italian and French ones. For example, the Lisbon Judgment to which I adverted in Chapter 7 is 59,559 words long.⁴⁵ More run-of-the-mill disputes of course are not scrutinised in such detail, but judgments are still considerably longer than in France or Italy. For example, a recent training costs dispute was dealt with in 2,653 words.⁴⁶ And

⁴¹ Ibid 168. If the muscle relaxant case is decided for the claimant because negligence means 'to cause unnecessary pain', then only the explanation will be reported – if a new muscle relaxant case comes to be litigated, the presiding judge has no way of knowing that similar facts have already been before the courts.

⁴² Ibid 160-1

⁴³ Ibid 167

⁴⁴ Ufficio di Statistica, 'La Cassazione Civile: Anno 2015' <http://www.cortedicassazione.it/cassazione-resources/resources/cms/documents/AG2016_civile.pdf> accessed 23 November 2017

⁴⁵ Case 2 BvE 2/08

⁴⁶ LAG Baden-Wurtemberg Case 22 Sa 27/13 (2013)

an appeal against a determination of the German Patent Office over the mark *Evangelische Bank* was rejected in 2,317 words.⁴⁷

The German courts report facts at length. The steps taken to procure and analyse the evidence are made explicit. This is in contrast with France and Italy. So is the German judiciary's writing style. Judgments, especially those of the higher courts, are much more discursive than in France and Italy. Nor is there any strong aversion from treading on issues of policy.⁴⁸

(2) Derivation

In Germany, all parts of a judgment can be used as precedent.⁴⁹ It is possible to argue that a case should be decided like a previous one because the facts of the two are similar. It is also possible to transplant the explanation of one outcome to the resolution of another case.

(3) Courts of Precedent

Strictly speaking, only the judgments of the *Bundesverfassungsgericht* are binding on other courts – if the court holds that some statute is unconstitutional, no lower court may apply it.⁵⁰ There is, however, a system of informal precedent. Unlike in France, precedent is not outlawed. In fact, statute tacitly supports its use. For example, failure to follow precedent set by the *Bundesgerichte* is a valid ground of appeal.⁵¹ In contrast to France and Italy, the courts explicitly create law where there is no statute⁵² and deem themselves free to adapt statutes to modern circumstances.⁵³

In practice, the judgments of the *Bundesgerichte* are followed. When the lower courts deviate from precedent, there is an expectation that the deviation will be explained.⁵⁴ There is, however, no 'horizontal' precedent – one *Bundesgericht* does not bind another.⁵⁵ There is something akin to constant jurisprudence, in that the more one *Bundesgericht* repeats a holding, the greater its persuasive weight.⁵⁶ But there is no point at which a line of cases becomes irreversible.

There are also several mechanisms through which case law is reconciled. Firstly, if a *Landgericht* wishes to deviate from its case law or from the case law of the *Bundesgericht*, it is under a legal obligation to refer the question to the higher courts.⁵⁷ Secondly, if a *Bundesgericht* wishes to deviate from the case law of previous *Bundesgerichte*, there is a

⁴⁷ Bundespatentgericht Case 25W 10/15 (2017)

⁴⁸ Alexy, R. & Dreiger, R., 'Precedent in the Federal Republic of Germany' in McCormick & Summers (n 27) 21

⁴⁹ Ibid 49

⁵⁰ Ibid 26-7

⁵¹ Section 543 *Zivilprozessordnung* 2005

⁵² Ibid 25

⁵³ A very famous example concerns hyperinflation in the Weimar Republic. Then, the courts established price changes as a valid ground for rescission of a contract. For an English-language overview, see Dawson, J., 'Effects of Inflation on Private Law Contracts: Germany 1914-1924' (1934) 33 *Michigan LR* 171 and Hughes, M., 'Private Equity, Social Inequity: German Judges React to Inflation' (1983) 16 *CEH* 76.

⁵⁴ Alexy & Dreiger (n 48) 27

⁵⁵ Ibid 39

⁵⁶ Ibid 35

⁵⁷ Section 121 *Gerichtverfassungsgesetz* 1979

mechanism through which a Grand Panel is convened to make an authoritative decision on the question of law under consideration.⁵⁸ Thus even though there is no formal system of precedent, the ability of the courts to deviate from their previous judgments is controlled in practice.⁵⁹

(4) Fetters on Right to Appeal

There are limits on the right to appeal in Germany.⁶⁰ An appeal on a point of law, which is the type likely to be entertained by the *Bundesgerichte*, is only admissible if the legal matter is of 'fundamental significance', or if a cassatory judgment would 'further the development of the law', or if the needs of 'uniform adjudication' so require.⁶¹ That there are limits on the right to appeal means, accordingly, that there are fewer cases before the *Bundesgerichte*: they decided 4,377 civil actions in 2015, much fewer than in France or Italy.⁶²

4. England

(1) Content

English judgments are comparatively long. The High Court judgment in *Miller*, colloquially known as the Brexit case, ran to 17,592 words.⁶³ The judgment in *Stone v R*, an entrapment case, is 6,393 words long.⁶⁴ *Experience Hendrix*, a restitution case, was dealt with in 8,850.⁶⁵ The writing style of the English judiciary is discursive – the syllogistic conception of law is largely unknown. And the judiciary regularly discuss policy.

(2) Derivation

In England, there is a distinction between the *ratio* of a case and its *obiter*.⁶⁶ The *ratio* is binding. If one judge says that failure to administer muscle relaxant is negligent because it causes unnecessary pain, then 'administering unnecessary pain is negligent' is the *ratio* of the case. It is the essential element of the reasoning, without which the outcome could

⁵⁸ Section 132 *Gerichtverfassungsgesetz* 1979

⁵⁹ The German Constitution authorises the legislature to introduce such controls: see Article 95(3) *Grundgesetz* 1949

⁶⁰ Alexy & Dreiger (n 48) 19

⁶¹ See Section 543 *Zivilprozessordnung* 2005

⁶² Bundesgerichtshof, 'Jahresstatistik'

<<http://www.bundesgerichtshof.de/SharedDocs/Downloads/DE/Service/StatistikZivil/jahresstatistikZivilsenat_e2015.pdf?__blob=publicationFile>> accessed 23 November 2017

⁶³ *Miller and another v The Secretary of State for Leaving the European Union* [2016] EWHC 2768

⁶⁴ [2000] EWCA Crim 48

⁶⁵ [2002] EWHC 1353 (QB)

⁶⁶ For a detailed discussion, see Stone, J., 'The Ratio of the Ratio Decidendi' (1959) 22 MLR 597 and Simpson, A., 'The Ratio Decidendi of a Case' (1958) 21 MLR 155. For example, in *Jackson v Attorney General* [2005] UKHL 56, the facts were that the House of Commons had passed an act banning fox hunting, but the House of Lords blocked its passage. The House of Commons then triggered the Parliament Acts to override the Lords. Jackson sued, arguing that this was an illegitimate use of the Parliament Acts. The distinction between the *ratio* and *obiter* is evident from the judgment of, among others, Baroness Hale. She held that the Parliament Acts could be used to pass ordinary legislation, such as bans on fox-hunting. She also said, at para 163, that one Parliament may bind another, for example by requiring specific supermajorities. But since this was not necessary to ground the holding in *Jackson* itself, it would not bind future courts. As Baroness Hale said, it was 'for another day' (ibid).

not have been reached. The next judge is under an obligation to apply it. If, on the other hand, the judge adds that 'the law of negligence is meant to regulate pain and suffering in general', then that remark is *obiter* – it is not necessary to know the general purpose of the law of negligence to determine how the muscle relaxant case should be decided. Therefore, that explanation is not binding on the next judge – he is free to define the purpose of negligence anew.

There is also the distinction, which I noted earlier, between points of law and points of fact. Findings of fact are not binding on future courts – if one judge interprets some evidence in one way, the next judge is not bound by that interpretation. On the other hand, a finding of law is binding – a definition of negligence produced by one judge, if within the *ratio*, binds future judges. Issues of mixed fact and law, which I discussed in Chapters 4, 5, and 6, cause difficulties – their legal elements are binding and the factual ones are not. In practice, it is never possible to tell which is which.

There is no equivalent to the constant jurisprudence doctrine. The precedential weight of a holding is independent of the frequency with which the courts repeat – one judgment suffices to establish an authoritative point of law.

(3) Courts of Precedent

The High Court, the Court of Appeal, and the Supreme Court can all generate precedent, albeit in different ways. As a matter of theory, one High Court is not bound by another. As a matter of practice, they virtually always follow one another, deviations always have to be justified, and if the justification is unpersuasive the Court of Appeal is likely to restore the precedential position. The High Court also follows the Court of Appeal and the Supreme Court. The Court of Appeal is strictly bound by its previous rulings, except in the rare instances in which those are manifestly *per incuriam*.⁶⁷ It is also bound by the Supreme Court. The Supreme Court binds all lower courts, but not itself.⁶⁸

We may say, then, that as between the three levels of the courts, there is always 'vertical' precedent: a lower court can never depart from the judgments of a higher one. That is common, though only informally, in continental Europe as well. But in addition, there is in England also horizontal precedent: with the exception of the Supreme Court, no court can depart from judgments issued in the past by courts at the same level of the hierarchy. That feature is peculiar to English precedent, and makes it 'stronger' than in France, Germany, or Italy.

(4) Fetters on Right to Appeal

There are severe limitations on the right to appeal in England. Most cases never go beyond the High Court. To be allowed to appeal, a petitioner must generally obtain permission from the court which heard the case. If that court refuses, he may appeal the refusal to grant leave to appeal to the higher court. The petitioner will only succeed if the

⁶⁷ That is the effect of *Young v Bristol Aeroplane* [1944] KB 718. Lord Denning challenged this case in *Cassell v Broome* [1972] 2 WLR 645 and again in *Davis v Johnson* [1978] 2 WLR 533. In the former, he argued that the Court of Appeal is not bound to follow the House of Lords (as it then was). In the latter, he argued that the Court of Appeal was not bound by itself. Both arguments were categorically rejected by the Lords.

⁶⁸ Practice Statement [1966] 3 All ER 77

appeal has a ‘real’ chance of success or if the appellate court wants to clarify a certain point of law or to change it. This relationship obtains between the High Court and the Court of Appeal and also between the Court of Appeal and the Supreme Court. Thus the likelihood of a case reaching the Supreme Court is very low – in the last twelve months, that court has delivered 81 judgments⁶⁹, a miniscule fraction of the total number of cases heard by the English courts.

	Content	Derivation	Courts of Precedent	Fetters on Right to Appeal
France	Short, syllogistic, few facts	Constant jurisprudence	<i>Cour de Cassation</i>	None
Italy	Short, syllogistic, reported without facts in <i>Massimario</i>	By special office of <i>Massimario</i>	<i>Corte di Cassazione</i>	None
Germany	Long, discursive, facts reported at length	Any relevant part	<i>Bundesverfassungsgericht</i>	Some
England	Long, discursive, facts reported at length	<i>Ratio/obiter</i> distinction	Supreme Court, Court of Appeal, High Court	Considerable

III. Comparison

Recall that I conceptualised lawmaking as a process in which an input, information, is converted into an output, law. The cost-effectiveness of information acquisition and the uncertainty of the output differ with the law production technology. In the preceding section, I described four versions of one law production technology, precedent. I will now compare them, moving from cost-effectiveness through applicative certainty to hierarchic certainty.

⁶⁹ The relevant period is 1 April 2015 – 31 March 2016, The Supreme Court, ‘Annual Reports and Accounts 2015 <<https://www.supremecourt.uk/docs/annual-report-2015-16.pdf>> accessed 23 November 2017

1. Information Costs

In Chapter 8, I said that it is cost-effective for brute facts to be collected by the courts and for contingent facts and purposes to be produced by the legislature. In terms of contingent facts, Germany, Italy, France, and England are the same – the judge cannot incentivise the production of new information, and accordingly it is underproduced. Precedent and statute co-exist in all four countries and in all four statute trumps precedent, so that the legislature can intervene and produce information itself if it deems it necessary.

The four systems differ, however, when it comes to brute facts and purposes. In France and Italy, judges do not transmit the brute-fact information that they acquire. That is cost ineffective. In Germany and England, the courts do generate such information. But in England, the courts also produce purposes, which is cost-ineffective. In Germany, the courts' purpose-production competences are circumscribed. Most policy decisions are made by the Bundestag and Bundesrat. Accordingly, the German system is the most cost-effective out of the four.

Courts acquire information through litigation. Parties make assertions and adduce evidence to secure a favourable judgment. The French and the Italian courts, like all courts, receive information from litigants. But they do not report it – the facts of cases are either stated very briefly or not at all. Brute-fact information is not disseminated within the judiciary: the judge in one case does not know what the facts were in previous cases. Information gathered in litigation cannot be used in law production. If the courts do not report the brute fact information that they acquire, then there is no way for the French or Italian legislature to use that information when it makes laws. Parliament has to gather the information anew. I argued in Chapter 8 that this is cost-ineffective. The legislature has to spend resources on experts, committees, surveys, and so on, purely to acquire information which the courts already hold.

That problem does not exist in England and in Germany. Both the English and the German courts – even the cassatory ones – describe facts in detail. Most English and German decisions are published. The information they contain is made available to other judges and to the legislature. Consequently, there is no need for the legislatures of those countries to pay for it to be collected anew. The ineffectiveness of the French and the Italian system is avoided.

There is, however, a difference between Germany and England when it comes to purposes. The reader will recall that the courts are cost-ineffective when it comes to purposes. In England the courts do produce purposes – in among others contract, tort, and property, the output of the legislature is negligible. In those areas and in others, the English judiciary must coordinate on purposes, with the attendant diseconomies. Conversely, in Germany there are relatively few areas in which statutes are lacking, and it is only in those that the judiciary has to produce purposes. Such instances being much less frequent than they are in England, the German system is more cost-effective.

To recapitulate, a cost-effective law production technology would allocate brute facts to the judiciary and purposes to the legislature. France and Italy allocate purposes to the legislature, but the courts there do not report brute facts. In England, the courts do collect

brute fact information, but they also produce purposes. Again, there is a misallocation. In Germany, the courts collect brute-fact information, but they very seldom produce purposes. Germany comes closest to the optimum.

2. Applicative Certainty

I now move to applicative certainty. In Chapter 3, I posited that applicative certainty depends on the level of legal abstraction. The vaguer the law, the more difficult it is to apply to specific facts.⁷⁰ In other words, applicative certainty is higher under a rule than under a standard. Precedent, it is said, can convert standards into rules: as a standard is applied in litigation, we acquire examples of its application. With every case, it becomes easier to tell how the standard will be applied in the future.⁷¹ The four systems which I described differ in the extent to which they convert standards into rules. The Italian system does that very seldom, the French sometimes, the German very often and the English virtually always. I will take each in turn.

In Italy, precedent is the function of a special office, the *Ufficio del Massimario*, which edits and summarises case law. It derives general principles – facts go unstated and the summaries are as short as possible. This does little to increase applicative certainty. Why so? Firstly, that there is no mention of the facts means that it is impossible to use analogy.⁷² Secondly, that the maxim must be brief means that it only contains very abstract statements. That makes it more difficult to predict whether the maxim applies to the next case.

In France, the facts are described very briefly, but there is no office in charge of summarising jurisprudence. Consequently, applicative certainty at French law may be expected to be higher than in Italy. Legal reasoning is brief, but not as brief as a single maxim. And judges are given some indication of the facts of previous cases. An example might be helpful. In France, like in most civilian countries, specific performance is the primary remedy for breach of a contract to give something.⁷³ The Code does not, however, specify how the primacy of specific performance is to be enforced. The Code, then, is applicatively uncertain: if A has a contract with B to deliver X and A fails to do so, we know that the courts will find A liable, but we do not know what would happen if A, despite that finding, refuses to deliver X. The French courts filled that gap through precedent, by developing the *astreinte*: for every day in which the promisor fails to render performance, the creditor must pay a penal sum.⁷⁴ *Astreinte* arose from the practice of the French

⁷⁰ if we are given the facts of the muscle relaxant case, it is easier to say what the outcome will be if we are given the law that 'negligence is unlawful, and negligence means causing unnecessary pain' than if we are given just 'negligence is unlawful'

⁷¹ If, for example, the muscle relaxant case comes to be tried and it is found that negligence applies to it because it is negligent to cause unnecessary pain, then the next time a muscle relaxant case comes to be litigated, we know how the negligence standard applies to it – an improvement in applicative certainty.

⁷² Under the muscle relaxant hypothetical, the office would extract the maxim 'unnecessary pain is to be avoided', but it would not indicate to the next judge that the case concerned a medical procedure, or electroshock therapy, and so on. It is not possible to reason about past cases by way of analogy – only deduction is possible.

⁷³ Article 1184 CC

⁷⁴ For the rules on *astreinte*, see for example Treitel, G., *Remedies for Breach of Contract: A Comparative Account* (OUP 1998) or Dawson, J., 'Specific Performance in France and Germany' (1959) 57 Michigan LR 495. 'Specific

courts – no mention of it is made in the Code itself.⁷⁵ And it does make the law more rule-like – the applicative uncertainty of the primacy of performance is reduced.

German precedent is less applicatively uncertain than French precedent. First of all, German judgments are longer, and state facts in full. Analogy can, accordingly, be used more widely. Moreover, in Germany there is no pressure on the judge to formulate the judgment syllogistically. There is, as a result, a richer body of information from which future judges can draw when deciding cases. And there is no restriction on the elements of a judgment from which a future judge can draw: it is possible to draw analogies between the facts of two cases and to use the more general explanations devised by other judges. Under the French model, only the latter is possible.

English law is the most applicatively certain out of the four discussed here. There are many more English judgments that can constitute precedent than there are German ones. In Germany, only the *Bundesverfassungsgericht* can produce formally binding precedent. It hears only a small fraction of the total volume of the disputes. In England, most litigation can generate precedent, and there is 'horizontal' stare decisis. If the muscle relaxant case is decided by a first-instance court in Germany, there is no reason to expect that another first-instance court would follow the same reasoning in a future muscle relaxant case. Conversely, if in England a High Court judge pronounces himself on the muscle relaxant case, the next High Court judge to hear such a case would be bound to follow the same reasoning.

3. Hierarchic Certainty

Hierarchic uncertainty arises when we do not know which of two (or more) laws applies to some particular set of facts.⁷⁶ I said in Chapter 3 that hierarchic certainty is a function of the complexity of a given corpus of law. The more laws there are, the likelier it is that some of them will overlap. Accordingly, the more laws a system of precedent generates, the higher its hierarchic uncertainty. I will now show that Italian precedent is likely to generate the fewest laws – and therefore Italian law must be the most hierarchically certain. France is similar. Conversely, in Germany and especially in England, the courts may be expected to generate many laws. As a result, those two systems are more hierarchically uncertain than the others.

I begin with England. In England, most incidents of litigation are potential sources of precedential law. The High Court, the Court of Appeal, and the Supreme Court can all generate laws. Those laws often overlap: the reader might recall the tension between the privity theory of contract and the rival one propounded by Lord Denning in *Douglas*⁷⁷, or

Performance Versus Damages for Breach of Contract: An Economic Analysis' (2006) 84 Texas LR 831 compares the French system to that in Germany and England.

⁷⁵ For its history, see Oosterhuis, J., 'Specific Performance in German, French and Dutch Law in the Nineteenth Century' (Martinus Nijhoff 2011) 39ff. It was, however, added to the Code very recently – see Order No 2016-131 (10 February 2016). This adds a new Article 1217 to the Code, which provides that 'sanctions that are not incompatible can be accumulated'. That law has only been in effect since October 2016, and it only applies to contracts entered into after that date

⁷⁶ For example, if we are told that to cause unnecessary pain is unlawful and also that parents are free to castigate their children as they wish, then there is hierarchic indeterminacy whenever a parental punishment causes unnecessary pain. One law points to one outcome, the other to another.

⁷⁷ *Smith and Snipes Hall Farm Ltd v River Douglas Catchment Board* [1949] 2 KB 500

the overlap between the disgorgement remedy in *Blake*⁷⁸ and the compensation principle from *Robinson v Harman*.⁷⁹ Such clashes routinely emerge in other areas of law too.

In Germany, fewer courts can produce precedent. Hierarchic uncertainty may be expected to be lower than in England. Moreover, in Germany the judiciary cannot generate laws at a level of abstraction higher than that of statute. If a judge is told that specific performance is primary and compensation secondary, he cannot say that compensation is the overriding goal of the law. This is unlike England, where there is no general contracts statute. Consequently, in Germany statute operates as an upper bound on legal complexity. There are fewer areas in which the judiciary can produce laws. This means that they produce fewer laws. As a result, hierarchical uncertainty is lower.

French precedent is more hierarchically certain than German precedent. The derivation technique is much more stringent. In Germany, anything that a *Bundesgericht* says may constitute precedent, and the *Bundesgericht* may say anything. In France, what the *Cour de Cassation* says only becomes precedent if a future *Cour de Cassation* repeats it, and there are also considerable limitations on what the *Cour de Cassation* may say – it must always restrict itself to syllogisms. For a novel premise in those syllogisms to become a law, it must be repeated a number of times by other courts. Thus the likelihood of any one statement contained a judgment becoming law is in France much lower than it is in Germany. In the aggregate, this translates into lower legal complexity in general – the courts in France produce fewer laws than the German ones. And since hierarchic uncertainty is a function of the number of laws produced, French precedent is less hierarchically uncertain.

Italian law is even more hierarchically certain than French law. In Italy, for a judicial pronouncement to become law, it has to overcome an additional hurdle. The *Ufficio del Massimario* must take notice of it, and rewrite it into a maxim. That rewriting is likely to abbreviate the holding considerably. In the aggregate, this results in there being fewer laws and less overlap. Italian law ends up being the most hierarchically certain out of the four systems discussed here.

4. Summary

I have compared France, Italy, England, and Germany along three dimensions: cost-effectiveness of information acquisition, as well as hierarchic and applicative uncertainty. In terms of information costs, German precedent is the most cost-effective, whereas English, French, and Italian precedent are further frp, the optimum. English law is the most applicatively certain, followed by German, then French, then Italian law. In terms of hierarchic certainty, Italian law is the most certain, followed by French, then German, the English law.

IV. Analysis

I now move to develop four interpretations of my comparison. The first concerns a hypothesis which I set out in Chapter 3, namely that there is an inverse relationship

⁷⁸ [2000] UKHL 45

⁷⁹ (1848) 1 Ex Rep 850

between hierarchic and applicative uncertainty. An increase in one results in a decrease in the other. My comparison reflects this.

Second, different systems manage that trade-off differently. The optimal balance cannot be identified in the abstract, so it is impossible to say which system is best. However, since German and English law manage the trade-off similarly, it is possible to compare them in terms of information costs. In that respect, Germany comes out superior. This runs contrary to the efficiency of the common law hypothesis.

Third, the argument that the English law is the most applicatively certain might be deceptive. This relates to the argument I developed in Chapter 5 – in the long run, there is a tendency for the common law to shift from standards to standards rather than from standards to rules. I will use the analysis developed here to show there is no equivalent tendency in the civilian systems. So even if the common law makes short-term gains in applicative certainty, in the long run it might tend to vagueness, a difficulty from which the civilians are free.

Fourth, and last, the stricter the other controls on hierarchic certainty, the more appeals to the highest court can a legal system sustain. This might explain why controls on the right to appeal in France and Italy are much laxer than they are in Germany and England.

1. Applicative and Hierarchic Uncertainty

I posited in the beginning that there is an inverse relationship between applicative and hierarchic uncertainty. This is corroborated by my descriptions of the four systems here. The most applicatively uncertain one, Italy, is also the most hierarchically certain. And the most applicatively certain, England, is the most hierarchically uncertain. German law is the second most applicatively certain, and the second least hierarchically certain, and France is the second most applicatively uncertain and also the second most hierarchically certain.

Applicative and hierarchic uncertainty depend on the content of judgments, the derivation method, and the number of courts of precedent. A push in one direction is a pull in another. If judgments are longer, then there is more to base predictions on, but it is also likelier that the pronouncements made in those judgments will overlap. If more judgments are used as precedent, then we have more examples of the application of vague laws, and also more overlap. If more courts can produce precedent, then there will be a large number of binding judicial pronouncements, and also more hierarchic uncertainty.

The efficiency of the common law hypothesis postulates that the common law is efficient because with time it expands over more and more factual patterns. It improves with every case. If what I have just said is correct, that choice in common law systems has costs, which the civilians avoid by making a different choice, which has costs of its own. The common law of England might be more applicatively certain. But it is less hierarchically certain. While in England one can tell how a particular law will be applied to the particular circumstances of a case, there will very often be disagreement as to whether it is that particular law that should be applied or some other. It might be that Article 1383 of the

French Civil Code, which regulates negligence, is so brief⁸⁰ that predicting its application is very difficult. But there can seldom be doubt that it is Article 1383 which ought to be applied, rather than some other provision of the Code.

The common-civilian divide can be represented as a spectrum. Italian law is hierarchically certain but applicatively uncertain. On the other end of the spectrum lies English law, which is highly applicatively certain but also very uncertain hierarchically. It is not possible to tell which is better. If pure types existed, it would not be possible to tell whether a system which has one vague law is preferable to a system with a thousand overlapping laws. In the former, there would be the problem of trying to divine what that law means in individual cases. In the latter, the problem would be to decide which of the thousand laws should govern in every particular case. There is nothing to say that one state of affairs is preferable to the other. Of course, the systems described here are not pure types – Italy has more than one law, and not all English laws overlap. But the point, I think, stands: there is nothing to say that the way the balance is struck in Italy is better, or worse, than the way in which it is struck in England.⁸¹

2. Information Costs

I have so far striven to convince the reader that there is no reason to think that the civil law is worse than the common law. I now want to go one step further, and show that there is one way in which the civil law is better. Out of the four systems that I used as examples above, two strike the balance between applicative and hierarchic uncertainty in a similar fashion – Germany and England. In both, judgments are long and the derivation technique permissive. There is a tendency to favour applicative over hierarchic certainty. This similarity makes it possible to compare the two on a third dimension, which I here take to be information costs.

In that respect, German precedent is superior. The judiciary in both England and Germany report brute facts extensively. That is an economy – there is no need for the legislature to pay for the same information. But in England, the judiciary also have to coordinate on purposes often – otherwise, no common law would be produced. That is cost-ineffective: since one English judge does not know the identity of the other judges who will have to

⁸⁰ The *Code Civil* contains five Articles which encompass the law of torts. Article 1382 provides that '[a]ny act whatever of man, which causes damage to another, obliges the one by whose fault it occurred, to compensate it'. Article 1383 stipulates that liability extends not only to intentional, but also to negligent acts. The other three Articles deal with vicarious liability, the liability of owners of animals, and that of building owners respectively.

⁸¹ Ideally, the optimum would be reached at a point where the addition of one further law increases hierarchic uncertainty by a greater margin than it decreases applicative uncertainty. Finding that point is in reality impossible: one would have to draw up a list of all possible cases that may ever come to be litigated, and see how many possible interpretations each additional law removes from the possible set of interpretations, and then compare this to the number of cases in which the resultant laws overlap. To conduct the analysis in the abstract, then, would require complete information about all possible states of the world. But if we had such information, we would be able to design a perfectly certain law – see Kaplow (n 8) – so that the whole analysis would be void. Moreover, the hypothesis developed here takes no account of metalaws, which dramatically alter the way in which hierarchic indeterminacy increases. To account for those, it would have to be necessary to gauge the number of instances in which the hierarchy of laws is given by the metalaw – a task which, given the way metalaws are formulated, is likely to prove elusive – see further Chapter 7.

agree with his proposed purpose for it to become law, there is a strong incentive to forebear from expressing policy preferences at all.

In Germany, that problem would be unusual since purposes are generally defined in a statute. Moreover, in Germany only the Constitutional Courts can generate precedent. Therefore, the only persons who need to coordinate upon a single interpretation are the members of the bench hearing a certain case. They know each others' identities *ex ante*, meaning that the cost of coordination is considerably lower than in England. There is a system of informal precedent in place. But there are also mechanisms that channel deviations to the highest courts – if a *Landesgericht* wishes to deviate, it must refer to the *Bundesgericht*, and if the *Bundesgericht* wishes to deviate from its own case law, it must refer the question to a Grand Panel. Thus eventually the question of whether a deviation is permissible winds up before a comparatively small number of persons likely to be familiar with one another.

What emerges, then, is that the English and the German system exhibit roughly the same hierarchic and applicative uncertainty, but the German system is more cost-effective when it comes to the acquisition of information. If this is correct, then the German system has an advantage over the English one. Their respective outputs are similarly uncertain, but in Germany the input, information, is acquired at a lower cost.

3. Standard-to-Rule and Standard-to-Standard

In Chapter 5, I discussed a peculiar mechanism through which the common law, rather than convert standards to facts, shifts from one standard to another. The point, in brief, was this: the application of many common law standards, such as reasonableness, due care, intent, and so on, is a question of 'mixed' fact and law. When those are applied in cases, the reasoning contains 'legal' parts, which bind the next judge, and 'factual' ones, which do not. But it is never possible to tell precisely whether something is 'legal' or 'factual'. It becomes unclear which parts of a judgment are binding on future judges and which parts are not. As more cases are decided under the standard, uncertainty increases. The common law judiciary reduce uncertainty by shifting to a different standard altogether – say from one based on 'reasonableness' to one based on 'implicit expectation'. There is nothing to say that the new standard will be more specific than the old – the gain in certainty is secured merely by switching from an amortised standard to an unamortised one.

If this is correct, then we may say that in respect of those standards which are 'mixed', the common law becomes more certain in the short-run but it reverts to uncertainty in the long-run. The first few judgments might convert a standard into a rule. But as the courts apply the standard more and more, there will be too many interpretations, some of which conflicting. The law will eventually become uncertain. English law might then in the long-run be as applicatively certain as that of France, Germany, or Italy. At the same time, it is less hierarchically certain than all three, and also less cost-effective than German law. If this is correct, then it would ground an 'inefficiency of common law' hypothesis.

That argument depends for its validity on two others. First, I must show that there is no analogous mechanism in the civil law, that is, that the civil law does not oscillate between

vague standards. Second, I must also show that the argument holds for *all* common-law standards. I think the first argument is plausible but the second one is not. The common law only oscillates between standards when their application is a question of ‘mixed’ fact and law. If it is not, then the tendency is to greater applicative certainty, as predicted by the literature. Accordingly, I limit myself to saying that the civil law is more efficient than the common law for those bodies of law which contain ‘mixed’ questions. That caveat does not render the point meaningless, since a great many common law standards are ‘mixed’.

The civil law exhibits no tendency to oscillate between standards. The most obvious reason is that the civilian judges have no power to alter standards contained in codes. In the context of England, I discussed the ‘reasonable contemplation’ standard in *Hadley v Baxendale*⁸² – it ended up with so many interpretations that the English judiciary switched to a ‘tacit assumption of risk’ one in *The Achilles*.⁸³ Article 1150 of the *Code Civil* contains a similar provision: a debtor is liable only for damages that ‘were foreseen’ or ‘could have been foreseen’ when the contract was made. Now, even if the French courts were to produce tens of interpretations of Article 1150, as the English courts had done by the time *The Heron II*⁸⁴ was decided, they would still be unable to eventually shift to a ‘tacit assumption of risk’ theory of consequential loss. To do so would require them to amend Article 1150 of the *Code Civil*, which only the legislature can do. And the point clearly extends to all standards that are contained in a code.

This is however insufficient to show that the civil law is more certain in the long run. If the French courts had in fact interpreted Article 1150 in tens of ways, then it would be just as uncertain as *Hadley v Baxendale* at the time when it had so many interpretations. English law would be superior, since it at least offers the option of remedying the problem by having the judges change the law without waiting for the legislature. But in fact there is no possibility of having so many interpretations co-existing within the French, or for that matter the Italian or German, legal order. Why so? Firstly, in French law, there are no ‘mixed’ questions – the application of law to facts is always a question of law.⁸⁵ As a result, there are no ‘mixed’ issues in French law. Likewise, in Italy the *massimario* does not report facts. There being no way for the judiciary to discover the facts of previous cases, it is safe to assume that no ‘mixed’ finding can become part of the Italian body of precedent.

What of Germany? There, the whole of a judgment may constitute precedent and judgments contain a great deal of factual detail. There are obvious similarities with England: a factual finding can presumably in the future become binding on other courts. But, unlike in England, there are limitations. In Germany, the higher courts operate a strict doctrine of *certiorari*, in which a case may only be admitted for cassatory review if it raises an important point of law. Clearly, if the dispute concerns only the application of a standard to the facts of a particular case, it is unlikely to clear that threshold. ‘Mixed’ interpretations are unlikely to feature heavily in the docket of the *Bundesgerichte*. In

⁸² [1854] EWHC J70

⁸³ [2008] UKHL 48

⁸⁴ *C Czarnikow v Koufos* (*The Heron II*) [1967] UKHL 4

⁸⁵ Troper & Grzegorzczak (n 27) 104

England, the over-interpretation of *Hadley v Baxendale* was driven by the High Court and the Court of Appeal. In the two House of Lords judgment, *The Heron II* and *The Achilles*, the Lords clarified the law, rather than adding to the existing stock of interpretations. If only those judgments had been of precedential value, then uncertainty would have remained constant.

Thus we see that, through either treating 'mixed' issues as legal or through limiting the set of binding judgments, the civilian systems avoid the mechanism through which in England those 'mixed' issues erode long-term applicative uncertainty. If all issues in English law were 'mixed', this would translate into an inefficiency hypothesis – English law would always be less applicatively certain than continental law while also being less hierarchically certain.⁸⁶ That, however, would be a step too far. There are many standards in English law which are not 'mixed'. In contract, 'consideration' means 'economically valuable consideration'. That interpretation is strictly a matter of law – it is not open to a judge to treat it as being confined to the facts of *Dyer's Case*.⁸⁷ Likewise, 'malice aforethought' means 'intention to kill or to cause grievous bodily harm'.⁸⁸ The latter interpretation is again a pure issue of law – it would not be open to any judge to modify it in the light of the facts. The argument from Chapter 5 clearly does not apply to such standards – there, the common law serves to increase applicative certainty.

4. Certiorari

In my analytical framework, I focused on certainty. But there are also other desiderata – a law may for example be uncertain and just, and its fairness might well compensate for its lack of predictability. It is self-evidently better to have the law 'the innocent shall not be imprisoned' than to have 'all blue-eyed babies shall be drowned upon birth', even if the latter is much more predictable. I want now to focus on one such desideratum which lies outside of my analytical framework, namely the right to appeal.

The point that I wish to make is as follows: civilian systems lack in applicative certainty. This is particularly pronounced in the case of France and Italy, where hierarchic certainty is achieved by limiting the content of judgments or by designating very few courts as being of precedent. In England, and to a lesser extent in Germany hierarchic certainty is partly attained by limiting access to the superior courts to only those cases which raise novel points of law. This limits the number of laws that the Supreme Court and the *Bundesgerichte* can generate. Even if we suppose that the uncertainty trade-off is struck optimally in those countries and sub-optimally in France and Italy, it might still be the case that the latter are superior. This might be so if we proceed from the premise that appeals make the system fairer. It might also hold as a matter of economics: if appeals reduce the number of errors across the system, the benefits of fewer errors might outweigh the costs of applicatively uncertain law.

This is somewhat convoluted, so it is best to elaborate. In England, the Supreme Court binds all other courts, and it is not bound by its previous judgments. Hierarchic certainty is managed by allowing that court to choose which cases it wants to hear. This limits the

⁸⁶ This would also go against my hypothesis that there is a trade-off between hierarchic and applicative certainty.

⁸⁷ [1414] 2 Henry V F5 26

⁸⁸ *R v Moloney* [1985] AC 905

number of laws that it can produce – the volume of Supreme Court litigation is much lower than the total volume of litigation. Therefore, the total number of laws that this court produces is considerably lowered. And once the Supreme Court makes a law, no lower court can make a law that contradicts it. In this way, legal complexity is limited, and hierarchic certainty partly attained.

This is efficient within the confines of my analysis: there is no loss in information cost-effectiveness, since the lower courts still acquire and disseminate information. And there is no loss in applicative certainty – the lower courts can clarify the laws that the Supreme Court makes, but they are forbidden from contradicting it. Thus there is a gain in hierarchic certainty which does not carry a corresponding loss of applicative certainty or information cost-effectiveness. What is lost, instead, is litigants' ability to appeal: in most cases, leave for review will be denied.

In France and Italy, hierarchic certainty is managed by limiting the content of judgment to bare essentials, by having a special office redact judgments to their shortest essences, and so on. These measures do come at a cost within my framework – there is a loss in applicative certainty. And the information that the courts gather is not disseminated. But there is also a gain – litigants can appeal most cases twice if they wish.

The Franco-Italian arrangement might have two advantages. Firstly, quite aside from any efficiency reasons, it might be that a system which allows claimants to appeal more is fairer, or that the public perceive it as being fairer. This might be desirable even if it is inefficient, since there is no reason to suppose that efficiency should trump fairness.

Secondly, there is also an economic rationale for allowing parties to appeal more frequently. In any system manned by humans, some rate of error in the application of laws to facts is inevitable. For example, even if the law says unambiguously that failure to apply muscle relaxant before an electroshock is not negligence, some judge might nonetheless hold a defendant liable for failing to administer it. If that judgment can be appealed, the chance of the error being rectified become positive. And if the holding can be appealed twice, all the way to a Supreme Court, the likelihood of the error going undetected decreases considerably. That advantage is of course not unqualified – appeals can also be frivolous, and they cost money as well as time. There is again a trade-off, in that the cost of error must be weighed against the cost of appeals. I do not propose to develop, in this space, a complete theory of that problem.⁸⁹ Suffice to say for now that the French and the Italian strike that trade-off one way and the English and the Germans in another – there might at least be presumptive equality.

⁸⁹ For a detailed analysis of the economic rationale of appeals, see Shavell, S., 'The Appeals Process as a Means of Error Correction' (1995) 24 JLS 381. One potential line of argument, aside from those developed by Shavell, is that the Franco-Italian approach combines an unfettered right to appeal with severe limitations on the content of judgments. This means that the reviewing courts, when they do entertain appeals, have to gather much of the information that the trial court gathered anew, since it is not contained in the text of the judgment. Therefore, the cost of appeals is in those systems higher than in England and Germany, where the judgment contains more information. The overall efficiency of the Franco-Italian system, then, must depend on whether the cost of duplicative judicial labour is compensated by the avoidance of trial-court errors. To that question I presently can give no answer.

V. Conclusion

What I have sought to do on these pages is to provide an example of how the theories developed earlier might be applied to real-life legal systems. I began with three preliminary points: that any system of law must use precedent, that versions of precedent differs in terms of judgment content, precedent-derivation technique, courts of precedent, and fetters on the right to appeal, and lastly that choices on each of those four dimensions strike trade-offs between information costs and uncertainty, both applicative and hierarchic.

I then provided some descriptive material for the four countries. In Italy, the content of precedent is determined centrally, by the *Ufficio del Massimario*. Derivation is for the compilers of the *massimario* too. The only courts of precedent are the cassatory ones, and the right to appeal is unfettered. In France, there is no equivalent office – any judgment of the *Corte di Cassazione* can constitute precedent. But the derivation technique is different – to be binding, a holding must form part of the constant jurisprudence of the court, that is, the court must repeat it in several cases for it to become law. As in Italy, the right to appeal is not subject to any stringent controls. In Germany, any part of a judgments may be used in the future, and content-wise they are much longer than those in Italy and France. English judgments, too, are long. But all three levels of the court system produce precedent, and all but the Supreme Court bind each other horizontally – a feature which is unique to English precedent.

I then moved to compare the four systems. In terms of information cost-effectiveness, Germany comes closest to the optimum – purposes are produced by the legislature, facts by the courts. In England, there is some ineffectiveness – the judiciary both produce purposes and facts. France and Italy are also suboptimal – although purposes are for Parliament, brute facts are not reported. In terms of applicative certainty, England comes out superior, followed by Germany, France, and lastly Italy. And in terms of hierarchic certainty, that ranking is reversed – Italian law is the most hierarchically determinate, followed by French law, German law, and lastly English law.

I ended by discussing some implications. Firstly, there is an argument for saying that, within my framework, German law is superior to English law. It strikes the same balance between the two kinds of uncertainty I discussed, but it does so at a lower cost of information. Secondly, English and German law balance the two kinds of uncertainty in one way, French and Italian law in another. There is nothing to say that one way of striking the balance is better than another. Third, it is even possible to argue that the common law is less efficient than the civil law: in Chapters 4, 5, and 6, I discussed a mechanism through which the English courts oscillate between vague standards. There is no corresponding mechanism in the civil law. Fourth, and last, the civil law, especially in its French and Italian variants, offers parties more opportunities to appeal. Common law countries cannot do the same because of the peculiar way in which they manage hierarchic uncertainty. It is possible that the civil law entails fewer errors without a substantial reduction in aggregate uncertainty. If this is right, then it is superior to the common law.

Chapter X

CONCLUSION

I began with a general analytic framework, one in which the choice between precedent and statute influences the cost of information and legal certainty. I then expatiated on each element at great length, debating hypotheses, refutations, counter-refutations, refinements, extensions, and such like. In that morass, it must have been easy to lose sight of the point of entry. What I propose to do now is to resurrect the originating framework, to compress the previous chapters into it, and to wrest from that reformulation some implications for policy and theory.

I. Lawmaking as Production

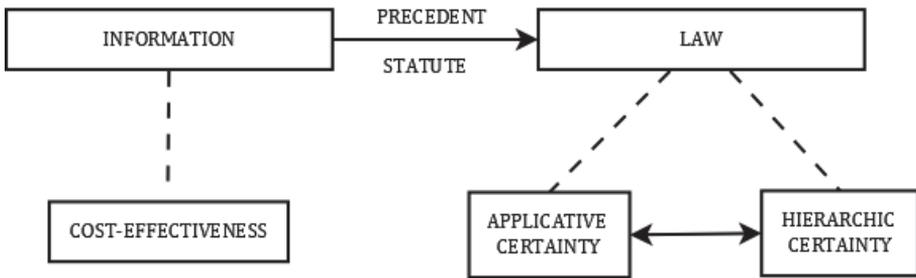


Figure 7: General Analytical Framework

The reader might remember being shown a similar diagram on the first page of this volume. The diagram is meant to capture the following idea: the making of laws is in like the production of a good, say a chair or even a book. The latter analogy is more precise, since law is an information product – the state uses it to inform the public about its potential⁹⁰ coercive actions. Like any production exercise, lawmaking entails at first the acquisition of an input, which is information. To make law, the lawmaker must know what the world is like, what he wants it to be like, and what it will be like if the law were different. In the law-production exercise, that information is an input. The exercise has as its purpose the conversion of that input into an output, law. The conversion of inputs into outputs might be effectuated through one of two technologies, statute and precedent.

Those technologies being very different, we may expect to observe technology-dependent differences in both inputs and outputs. I focus here on two. On the input side, the cost of information differs between precedent and statute. It is cheaper for the judiciary to access some kinds of information and for the legislature to access others. On the output side, there are differences in form: some laws are clearer if made by judges, others if they are made by parliaments.

⁹⁰ The state's coercive actions are 'potential' in two ways. Firstly, they are always conditional on some factual pattern occurring in reality – if the pattern does not occur, nor will coercive action. Secondly, the state generally only applies sanctions to a proportion of the factual patterns which do in fact occur: not every incident of theft is prosecuted, not every crime proven, nor does every breached contract land up before the courts. Enforcement is imperfect.

Writing certain laws is more information-intensive than writing vague ones. The formulation of uncertain laws – thou shalt not kill, be kind to thy neighbour, etc. – does not require the lawmaker to know much. More certain laws require more information. The modern law of murder incorporates a prohibition on killing and a host of exceptions, among which one for unintentional killings, for acts committed in self-defence, out of necessity, during a war, or by persons who are insane or whose mental faculties were dimmed at the time of the commission of the crime. To decide which killings to sanction and which to tolerate, the lawmaker must acquire a great deal of information – certainly more than if he simply tells the public that they shall not kill. Since that information has a cost, there is a trade-off between the cost of information and that of uncertainty. If that is right, then there is also a point at which the cost of an additional unit of information would exceed the benefits from the correspondent gain in certainty. The optimal law is not perfectly certain.⁹¹

How do precedent and statute come into that trade-off? The choice between the two can be exercised so as to minimise the cost of information while maximising certainty. What I did in the substantive chapters was to specify various ways in which lawmaking competences can be distributed, and to compare specific distributions.

I will shortly summarise my conclusions. Before I do that, I must make a further clarification. The trade-off I just described is between the cost of information and legal certainty. There is also a trade-off between two kinds of uncertainty, the applicative and the hierarchic. Applicative uncertainty is the ‘normal’ form of uncertainty that the literature discusses.⁹² ‘Thou shalt not kill’ can be interpreted in N ways, and out of those N ways the judge will pick only one. We do not know which interpretation the judge will pick, so we can only predict outcomes with a probability of $\frac{1}{N}$. Hierarchic uncertainty, on the other hand, denotes a situation in which the same facts trigger the potential application of two or more laws and at least two of those laws point to mutually inconsistent outcomes. If one law permits free speech and another outlaws blasphemy and sedition, then on some facts – publications denying the existence of God or calls for a general strike – the two point at diametrically opposite solutions. The judge needs to decide which laws has priority. In this example, there are only two laws that clash, but there may realistically be many more. Two laws may be ordered in two ways, three in six, four in twenty-four and so on. If M denotes the number of laws, then the probability that any one ordering will be chosen is $\frac{1}{M!}$.

There is a trade-off between the two types of uncertainty. A vague law can and often is made clearer by the addition of specific laws: there is the tort of negligence and also

⁹¹ That same point is made in, among others, Ehrlich, I. & Posner, R., ‘An Economic Analysis of Legal Rulemaking’ (1974) 3 JLS 257; Kaplow, L., ‘Rules versus Standards: An Economic Analysis’ (1992) 42 Duke LJ 557; Sunstein, C., ‘Problems with Rules’ (1995) 73 California LR 953.

⁹² See the authorities cited in the preceding footnote. The topic has also benefitted from extensive coverage in general legal theory: see, among many others, Holmes, O., ‘The Theory of Legal Interpretation’ (1899) 12 Harvard LR 417; Pound, R., ‘The Theory of Judicial Decision: The Materials of Judicial Discretion’ (1923) 36 Harvard LR 641; Hart, R., ‘Positivism and the Separation of Law and Morals’ (1958) 71 Harvard LR 593; Dworkin, R., ‘The Model of Rules’ (1967) 35 UCLR 14; D Kennedy, ‘Form and Substance in Private Law Adjudication’ (1976) 89 Harvard LR 1685.

specific laws on medical malpractice and road accidents, the latter serving to clarify the former. Their addition, then, causes the law to become more applicatively certain. But with each clarification, the total number of laws increases. An increase in the number of laws causes an increase in the ways in which those laws can overlap and also in the number of ways in which they can be ordered. Hierarchic uncertainty increases. There thus exists a point at which an additional law causes the system to lose, rather than gain, certainty. This is so whenever the gain in applicative certainty from an additional law is offset by the correspondent increase in hierarchic uncertainty.

If this were that, then we would have very few laws. Hierarchic uncertainty increases factorially and applicative uncertainty only diminishes marginally, so the point in question would be reached after one or two laws. In actuality, hierarchic certainty is managed through metalaws. Those metalaws do not eliminate hierarchic uncertainty altogether, but they do reduce it to varying degrees, which allows the legal system to grow more applicatively certain without becoming hierarchically unmanageable. A metalaw is a law which orders judges to follow one hierarchic ordering to the exclusion of others. For instance, the free speech versus blasphemy problem that I described is in practice solved by a metalaw such that constitutions trump ordinary legislation. Free speech is in most Western polities a constitutional right, whereas prohibitions on blasphemy are generally statutory. Where this holds, then, there is a metalaw which states that free speech trumps blasphemy. Use of the alternative ordering is precluded, and only one is available to the judge, making it easier to predict the outcomes of cases.

Note, however, that metalaws do not eradicate hierarchic uncertainty. This is so because metalaws might themselves be lacking in precision. For example, we say in private international law that foreign law applies *unless contrary to the policy of the forum*.⁹³ The public policy of the forum being a vague criterion, we cannot say with certainty which law the local courts will apply. Some hierarchic uncertainty remains. How much depends on the precision of metalaws. This is where the choice of technology comes in: some kinds of metalaws are more suited to precedent, and others to statute. Each of those metalaws strikes a different trade-off between applicative and hierarchic uncertainty.

There are, on this framework, three differences between parliament- and judge-made law. The first is the cost-effectiveness of information acquisition: some types of information are cheap for the legislature, others for the courts. The second is applicative certainty – some laws are more concrete if produced by the legislature, others if produced by the courts. The third is hierarchic certainty – parliaments and courts make different metalaws, and this causes their output to differ.

II. The Choice between Precedent and Statute

Having hashed the structure anew, I now move to position the arguments from the essays within it. I made three arguments: that precedent is better for brute facts and for (short-term) applicative certainty, whereas statute is better for contingent facts, for purposes, and for hierarchic uncertainty.

⁹³ See for example Article 21 Regulation (EC) 593/2008 on the Law Applicable to Contractual Obligations (Rome I)

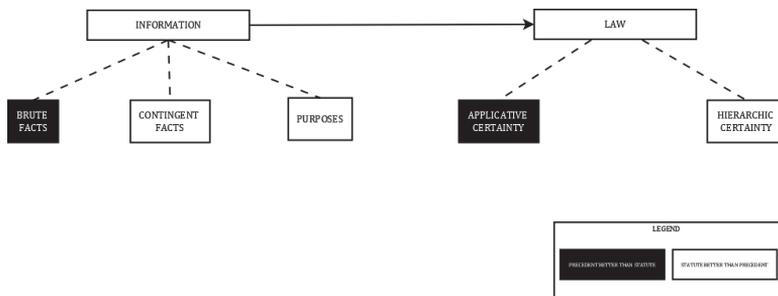


Figure 8: Precedent versus Statute

I sub-divided information into three types. Brute facts are those facts which are observable: the speed at which a vehicle can move, the colour of water in an area which is being fracked, the age of a man at a wedding ceremony, and many others. This kind of information the courts acquire in the course of litigation. If somebody is suing the driver of a vehicle because the vehicle hit them, they must speculate about its likely speed, and the driver will try to disprove their assertion. If a person in area affected by fracking operations sues the fracker, they are likely to report that the colour of tap water changed in order to convince the judge to award him the cost of a water purifier. If a woman alleges that she is not married to a man because he was underage at the time of the wedding, she is likely to adduce proof that he looked youthful on the day of the ceremony. The litigants incur the cost of reporting that information in the expectation of a favourable outcome to the adjudication, so that the information reaches the judiciary 'for free'. It might reach the legislature too, but only at a cost. The victim of a road accident cannot petition the legislature for a remedy, nor can those affected by fracking realistically expect parliament to pay for the installation of a water purifier, nor is it likely that the legislature will nullify a marriage gone sour. The legislature can pay someone to observe brute facts: it can organise a committee to investigate the consequences of fracking, it can measure vehicular speed through speed cameras, or it can pay persons to attend wedding ceremonies and report the ages of brides and grooms. Acquiring the information in that way is however costly, whereas under precedent it is not – precedent is more cost-effective.

Precedent is also more applicatively certain. The point is from the literature rather than any of the essays here, which instead dealt with an (important) exception.⁹⁴ The main line of the argument is this: if we are given a standard, such as 'drive reasonably', we do not know how to apply that to particular facts, such as someone driving at 60 km/h in a residential area. We might say that it is reasonable if the driver is young and has excellent reflexes, or that it is unreasonable because he had no urgent business at the time. If we are given one hundred judgments of the courts in which they say what factors are

⁹⁴ See for example Gennaioli, N. & Shleifer, A., 'The Evolution of Common Law' (2007) 115 JPE 43 and Kaplow (n 91).

relevant to the reasonableness determination - say that age is irrelevant but reflexes are and that the purpose of the trip is irrelevant for the reasonableness test - then it becomes much easier to apply the law to some set of facts. There is no equivalent mechanism under statute - the legislature does not decide cases, so it cannot update the content of the laws it produces as specific cases come to trial. Accordingly, precedent has an advantage.

If I am right, however, that advantage is not as significant as previously thought. If some issue involves a problem of 'mixed' fact and law, there is under precedent quite a lot of room for judicial manipulation, which eventually voids out the purported certainty gains. For example, suppose that a case under the 'drive reasonably' standard is before a judge, that the standard is 'mixed', that in Case 1 it was held that age is irrelevant, that in Case 2 it was held that reflexes matter, and that in Case 3 it was held that the purpose of the trip is irrelevant. After those three cases have been decided, a case comes to be tried in which a 20-year-old defendant drove at 80 km/h to reach a dental appointment. The judge, wishing to absolve the defendant, may say that the holding in Case 1 that age is irrelevant was actually a finding on fact: on the evidence of Case 1 in particular, age did not matter, but that is not always so as a matter of general legal principle. Case 3 is equally pliable, as is Case 2. Or, the judge may come up with a new criterion - say that dental health is an important policy concern - and ignore the previous three. In the next case, the dental health finding will be just as pliable as the others. As the process recurs, we may have a very large number of potentially conflicting interpretations co-exist within the law. Those interpretations do not make the law more applicatively certain - at best it is as uncertain with them as it would be without them. Since the interpretations would not matter much under statute, precedent and statute, on this specific hypothesis, are equal.

What I have said so far resonates, in spirit if not in method, with juridico-economic orthodoxy. I also offer some instances in which the 'efficiency of the common' law hypothesis does not hold. One area in which statute has an advantage is contingent-fact information. A contingent fact is a prediction about what the state of the world under some ideated condition. For example, we may say that if we forbid the sale of electronic cigarettes, cancer rates will increase or that if public transport is made free, carbon emissions will drop by 20%. Under precedent, this type of information is underproduced. For example, if I am suing the manufacturer of electronic cigarettes for exposing me to the risk of cancer, I might benefit from producing a study which demonstrates the relationship between electronic cigarettes and cancer. But I will only in fact commission that study if its cost is lower than my expected damages award in the suit. Otherwise, I would make a loss even if I win in court. Where contingent-fact information is underproduced, the legislature can intervene. In the hypothetical, it can commission the study of electronic cigarettes. Accordingly, statute comes out superior for contingent facts.

The second type of information for which the legislature is superior are purposes. Purposes are Humesian 'ought' statements: 'public health ought to trump hedonism', 'the environment ought to be more important than the oil and gas industry', and so on. There is no cost of producing or transmitting such information. But there is a cost of coordination whenever the lawmaking body comprises more than one individual, as it does under both statute and precedent. For a law to be made which outlaws fracking, for example, at least two persons must agree to something akin to the second 'ought'

statement in the example I just gave. Parliament in this respect enjoys a natural advantage, since it is designed for the very purpose of reaching agreements on points of ideology.⁹⁵

Statute also enjoys an advantage in hierarchic certainty. Statutory metalaws are more precise. Let me give an example. If we are told that one must drive reasonably and that one must also not drive at an excessive speed, there is, quite aside from vagueness, a problem of priority. For example, I might drive at an excessive speed yet still be reasonable – say because I am a policeman who is chasing a robber. Or I might drive at a speed which is not excessive while being unreasonable – for example if I am driving at 5 km/h on a highway. In both cases, the problem is not that the words in the law are vague, but rather that we do not know which of the two laws should prevail. Statute has an advantage because the two laws are likely to be produced at the same time, say that of writing the Highway Code. The overlap is palpable to the lawmaker, and he may act to resolve it, either by designating the speed limit a *lex specialis* or by introducing a reasonableness exception to it. Under precedent, we may expect that the two laws will be produced in separate cases – in Case 1, it might be held that driving slowly on a highway is ‘unreasonable’, and then in Case 2, later on, that driving quickly in a snowstorm is ‘at an excessive speed’. The two are likely to remain hierarchically uncertain in perpetuity. The first court cannot say that ‘unreasonableness’ criterion law is always paramount, since such a pronouncement would forever set the law in stone. Nor can the second court say that its judgment enjoys priority over that of the first. This would abolish the doctrine of precedent. At best, we can say one or the other will be binding ‘usually’, or ‘normally’, or ‘frequently’. Those words being vague, hierarchic uncertainty must always remain positive under precedent. Statute, conversely, always offers the possibility of remedying it.

With all of this said, I return to my original question – should we have laws made in courts or in parliaments? I said in the introduction that it depends. Between there and here, I have added to this certain conditions – if some law requires lots of brute facts to be made, and additionally if that law is not too complex – that is it is not hierarchically uncertain – then the courts are better. If the law requires a great deal of contingent facts, and if it excites ideological dissension, and if on top of all that it is also very complex and potentially hierarchically uncertain, then statute is to be preferred.

Why is this important? It has some important practical ramifications, to which I will get shortly. Before I do so, I want to highlight a theoretical tension between what I have just said and the prevalent school of thought in law-and-economics. Many in that school accept that judge-made law is always, or usually, or at any rate very often, more efficient than law made in a legislature.⁹⁶ If what I have said is correct, then there is no reason to

⁹⁵ Note that this point is quite distinct from arguing that the law which Parliament produces will be more efficient, or less skewed to one pressure group or another: see on this point Landes, W. & Posner, R., ‘The Independent Judiciary in an Interest-Group Perspective’ (1975) 18 JLE 875; Priest, G., ‘The Common Law Process and the Selection of Efficient Legal Rules’ (1977) 6 JLS 65; Rubin, P., ‘Why is the Common Law Efficient?’ (1977) 6 JLS 51.

⁹⁶ See among others Priest (ibid), Rubin (ibid), Goodman, J., ‘An Economic Theory of the Evolution of the Common Law’ (1978) 7 JLS 393; Posner, R., ‘What Do Judges and Justices Maximise? (The Same Thing Everybody Else Does)’ (1993) 3 SCER 1; Gennaioli & Shleifer (n 94); La Porta, R., Lopez-de-Silanes, F. & Shleifer, A., ‘The

think that one or the other commands an absolute advantage. Precedent is good for some things and statute for others. But there is no *a priori* reason to suppose that the common law is always efficient or that the use of statute ought to be avoided unless justified.

III. Applications

I answered my original question through terminology of my own device. That terminology is moreover very abstract. I am vulnerable to the suspicion that all this abstraction and complexity is there to mask my theory's circularity or fallacy. To ward that off, I want to spend now some time on sketching out a few policy implications of my analysis. Together they form no coherent plan for legal reform – all I propose to do is to show that my theory is not entirely divorced from reality.

1. Precedent

A. Technical Regulation

I said that precedent is desirable when the law to be generated is brute-fact intense. In all capitalistic legal systems, there is a rule to the effect that if the buyer of some property acquires it for consideration and without notice of third-party claims, then any action against him on the basis of such third-party claims cannot succeed.⁹⁷ I believe that is one kind of law which is particularly suitable for the courts.

Firstly, there are no, or at any rate very few, contingent facts involved: we have such a rule because otherwise the buyer would have to expend too much effort and resources on discovering whether the seller has good title. The ways in which title can be verified under such-and-such rules are contingent facts, but the cost of that information being produced is likely to be smaller than the amount at stake in an individual case. In practice, in such cases both buyer and claimant regularly indicate what steps the buyer would have had to take to discover the defect in title. The contingent facts advantage of statute does not matter.

Secondly, the protection afforded to bona fide purchasers is not ideologically charged. It is difficult to conceive of a situation in which socialists and conservatives disagree on whether unknowing purchasers of encumbered land should be protected from third-party claims. Consequently, it is unnecessary for whoever it is that makes the law to coordinate on points of ideology. The legislature's advantage in that respect is irrelevant.

Lastly, the bona fide purchaser law is not very hierarchically uncertain. It by its nature enjoys primacy over other rules in the law of property and contract. Otherwise, it would be meaningless. If we are given a law which says that 'the sale of a stolen car by a thief is void' and also another which says that 'a buyer acting in good faith and purchasing a car for value shall receive clean title', then the apparent tension is easy to resolve – the second law can only be an exception to the first. The greater hierarchic certainty of statute is irrelevant.

Economic Consequences of Legal Origins' (2008) 46 JEL 285; Djankov, S. et al, 'The New Comparative Economics' 31 JCE 595.

⁹⁷ A very early case which illustrates this is *Miller v Race* (1758) 1 Burr 452, though it is evident that the idea predates it. In the civilian tradition, the *bona fide purchaser* concept was known from the time of the Twelve Tables: see Hebert, P., 'Sale of Another's Movables – History, Comparative Law, and Bona Fide Purchase' (1969) 29 Louisiana LR 329.

I have so far said why statute has no advantages. I will now say why precedent does. Firstly, the main problem of the bona fide purchaser law is its applicative uncertainty – many of its elements are very vague. It is difficult to tell what ‘notice’ means – does this include constructive notice, or will only actual awareness of the claims suffice?⁹⁸ It is also very difficult to tell what ‘good faith’⁹⁹ is – for example, does a buyer who strongly suspects there might be a claim on the lands but goes on to buy it act in good faith? On my framework, these issues are best left to the courts. They can determine their meanings in individual cases.

Secondly, the information necessary to make a bona fide purchaser law is of the brute-fact variety. To decide who is protected and who is not, the lawmaker needs to know what ways there are to ascertain the buyer’s title, what the cost of undertaking each step is, what potential defects might manifest after those steps have been taken, why might the third party choose to sue the buyer rather than the seller, and so on and so forth. This is precisely the sort of information that litigants report to the judiciary. The buyer is in practice always likely to report what steps it took to verify the seller’s title, and also to say how laborious or expensive those steps were. The claimant, conversely, is likely to venture suggestions that had such-and-such steps been taken his claim would have been discovered, proof that the defendant’s behaviour was inconsistent with the good faith principle, and so on. Hence the advantage of precedent.

It is possible, I think, to abstract from this example. Whenever a law concerns a ‘technical area’ – which I take to mean one which is ideologically unexciting, which hinges on no expensive predictions, and which is not hierarchically uncertain – then there is a prima facie case for using precedent. Although these conditions sound somewhat vague, it is in fact easy to conceive of quite a few candidates – the rule against perpetuities, doctrines such as frustration or mistake, the insanity defence to murder, and others – which might fulfil them.

B. New Regulation

Precedent also has an advantage when a law is contemplated for a hitherto unregulated area. For example, at the time of writing much noise is being made about the regulatory challenges of what is called ‘the gig economy’ – services such as AirBNB, Uber, Deliveroo, and others – in which members of the public offer spare capacity, be it labour, vehicles, or accommodation, to other members of the public.¹⁰⁰ On my framework, the regulation of such areas is best left to the courts.

⁹⁸ For some problems which the term has given rise to at English law, see *Lloyd v Banks* (1868) LR 3 Ch App 488; *Lloyds Bank v Carrick* [1996] 4 All ER 630; *Jared v Clements* [1903] 1 Ch 428.

⁹⁹ For illustrations of the ambiguity of ‘good faith’, again from an English perspective, see *CPC v Qatari Diar* [2010] EWHC 1535 (Ch) and *Mid Essex Hospital Services NHS Trust v Compass Group UK & Ireland* [2013] EWCA Civ 200.

¹⁰⁰ See Lee, D., ‘How Airbnb Short-Term Rentals Exacerbate Los Angeles’s Affordable Housing Crisis: Analysis and Policy Recommendations’ (2016) 10 HLP 229; Friedman, G., ‘Workers without Employers: Shadow Corporations and the Rise of the Gig Economy’ (2014) 2 RKE 2; Cherry, M., ‘Beyond Misclassification: The Digital Transformation of Work’ (2015) 37 CLJP 577; Milkman, R. & Ott, E. (eds), *New Labor in New York: Precarious Workers and the Future of the Labor Movement* (2014 CUP).

Firstly, the courts have a timing advantage.¹⁰¹ If there are no substantial fetters on the right to litigate, the courts will generally know when society demands a law sooner than the legislature. This is so because the number of suits being brought about particular issues are a good proxy for the urgency with which regulation is needed. The volume of widely-reported litigation between Uber and its drivers or between AirBNB hosts and city councils lends some (anecdotal) credence to this hypothesis.

Secondly, that the area being regulated is new also means that there is generally little hierarchic uncertainty. If the courts make a law such as 'Uber drivers must receive the minimum wage' or 'AirBNB hosts must have hotel licences', it would be the first law that regulates the gig economy, so there are no laws with which it could overlap. As regulation of the gig economy matures – in the form of, say, laws which say which types of AirBNB hosts need a licence or what Uber drivers must do to qualify for the minimum wage – the likelihood of two (or more) of those conditions overlapping and pointing to different outcomes on particular sets of facts increases. So does hierarchic uncertainty. But in the early stages of regulation, there is no such problem. Statute's hierarchic uncertainty advantage does not matter.¹⁰²

C. Esoteric Regulation

Precedent also has an advantage when it comes to areas whose salience is high but which are litigated very irregularly. I call such areas 'esoteric'. One example is the case, infrequent but always well-publicised, in which twins are born conjoined¹⁰³ and one must be killed for the other to live. We may also place in this category cases in which the members of a religion refuse to allow medical practitioners to administer blood transfusions to their children¹⁰⁴, or cases in which able-minded adults partake in games such as Russian Roulette.¹⁰⁵ These facts are all what the judiciary would call 'unusual'. And each raises issues likely to be of considerable import to many members of society.

In this hypothesis, there is an informational economy under precedent which is unavailable under statute. It is possible to write a statute which regulates conjoined twins. That statute, to be effective, would have to set out every possible situation in which it might be desirable to kill off one child to save the other. It would also include criteria for deciding which of the two to kill, and how. The enumeration of all such instances would require a considerable investment in scientific information about Siamese twins. It would

¹⁰¹ It is in this respect worth noting that *Aslam and ors v Uber* (2015) unreported, which deals with the question of whether Uber drivers are entitled to the status of 'employees', is currently before the courts in England. There are presently no plans for legislation on the same issue.

¹⁰² There is also an obvious point here from the public choice literature, in that there might be differences in the *substantive* efficiency of the law the courts and the legislature produce. When new regulations is being mooted, the interests of incumbents (hotel proprietors, black cab drivers) are pitted directly against those of the new entrants. It is likely there will be systematic variance between the abilities of incumbents and new entrants to influence lawmakers depending on whether the lawmaker happens to be a court or legislature – see for example Landes, W. & Posner, R., 'The Independent Judiciary in an Interest-Group Perspective' (1975) 18 JLE 875. Thus the choice between precedent and statute might influence the extent to which the law favours the interests of incumbents vis-à-vis those of new entrants. I do not discuss this dimension of the problem here because my concern in this volume is with uncertainty rather than substantive efficiency.

¹⁰³ *Re A* [2001] 2 WLR 480

¹⁰⁴ *AC v Manitoba* [2009] 2 SCR 181

¹⁰⁵ *Commonwealth v Malone* (1945) 47 A 2d 445

further be necessary for the legislature to make life-or-death decisions, making ideological coordination very costly. The result would be a law which pre-empts the issue entirely. But the investment in information is likely to far exceed the savings from greater certainty. Only one in 100,000 babies are born conjoined.¹⁰⁶ And such births seldom give rise to litigation – it is apparently very infrequent for doctors to need to kill one twin to save the other. In England, for example, there has only been one instance in which the courts have had to tackle the issue.¹⁰⁷

Returning to our putative conjoined twins statute, the eventualities which the legislature would have to consider to produce it are unlikely to occur. Under precedent, we economise on the cost of considering such eventualities – the necessary information only has to be acquired if and when they materialise. The law is uncertain – for example, a mother about to give birth cannot predict very accurately what the state will do if she gives birth to conjoined twins and if it turns out that one of those twins has to be killed for the other to live. But the cost of that uncertainty across society is much lower than the cost of producing a law in advance. In this manner, a saving is realised under precedent.

A great many of the cases that reach Supreme Courts all over the world have highly unusual facts. I used a dramatic example. But it is easy to conceive of less evocative ones, for examples cases in which a swimming pool is built with a depth of six feet but the contract stipulates a depth of seven feet and the promisee wants the swimming pool demolished and rebuilt for that reason.¹⁰⁸ There is an instinctive tendency to lament the lack of statutory guidance in such instances. But in practicality, the cost of such a statute would far exceed the benefit from greater certainty. In all such esoteric cases, precedent is superior.

2. Statute

A. Ideologically Divisive Regulation

I now move to discuss some types of regulation for which statute is preferable. Statute enjoys an advantage over precedent for what I called purposes – statements such as ‘national security should trump individual rights’ or ‘individual self-determination should trump paternalism’. I will give three examples. The first is uncontroversial, but might be useful as a demonstration. It would be counter-productive to have the courts make decisions on taxation policy. Suppose the lawmaker has to choose between a progressive income tax, under which the higher a person’s income the higher the rate of tax that they pay, and a flat rate, under which all taxpayers contribute the same proportion of their income to the public purse. This choice is never made by judges, but there is nothing that in theory prevents the judiciary from making it.¹⁰⁹ For example,

¹⁰⁶ For different estimates, see Mutchinick, O. et al, ‘Conjoined Twins: a Worldwide Collaborative Epidemiological Study of the International Clearinghouse for Birth Defects Surveillance and Research’ (2011) 157 AJMGCSMG 274.

¹⁰⁷ *Re A* (n 103)

¹⁰⁸ *Ruxley Electronics and Construction v Forsyth* [1995] UKHL 8

¹⁰⁹ By this I do not mean to abstract from the doctrine of the ‘separation of powers’ – I mean merely that there is nothing in theory which prevents us from derogating from it, or modifying it so as to switch certain matters to the discretion of the judiciary. The judiciary are in all countries to some extent involved in the making of law, and the extent of their involvement may vary very dramatically – the French judiciary are said to create very little, the US Supreme Court a lot. There is in all countries a limit on what the courts feel entitled to do – but the

suppose there is a progressive tax system in force. A litigant who favours a flat tax rate may challenge the progressive tax rate, say because it is discriminatory. The judges could uphold that complaint and order the government not to discriminate between different income groups. This would have the effect of switching to a flat rate tax system.

Why would this be undesirable? The choice between the two types of tax is to a very large extent ideological. A socialist judge is likely to favour a progressive tax and a laissez-faire one a flat rate. It is reasonable to suppose that there is some distribution of socialist and laissez-faire judges in any legal system – so precedent could in theory reflect the aggregated preferences of the judiciary. But the mechanism through which judicial preferences are aggregated is not very cost-effective. Firstly, if one judge is a socialist and favours the progressive tax, he has no way of knowing whether the appellate judge too will be a socialist who would uphold his finding. Secondly, since the judiciary are eager to avoid the impression that they decide ideologically, they are unlikely to want to reveal themselves as either socialist or laissez-faire. Most judges, then, would prefer to say nothing on the design of the tax system. This reticence in turn makes it less likely that they will produce a law on the point. The legislature suffers no corresponding disability – it is generally possible to tell what the distribution of socialists and free marketarians is by merely examining the composition of parliament. From that distribution, it is possible to infer the likely level of enthusiasm for one form of taxation or another. If this is right, then it is not at all surprising that the choice of tax policy is in most modern states made by the legislature.

Let me now give a second example, which again concerns an area of policy which is traditionally reserved for the legislature. Should rail infrastructure be owned by the state or by private actors? It is again possible to have the courts make this choice. For example, if the state runs the railways, a prospective private operator could argue before a court that this is in restraint of trade. If the courts agree, they may order the government to divest. Like with tax, in reality the courts never make that choice. Why so? Suppose that in England, where the railways have been part-private since the nineties, the courts were to embark on reform. In a case between, say, a disgruntled passenger and a private operator, the trial judge can initiate such reform by saying that he favours renationalisation. He must then hope that in the Court of Appeal, two out of three judges will agree with that proposition. If two judges do in fact agree, then they along with the trial judge would hope that three out of five members of the Supreme Court will also agree. At each step, the judges who seek reform do not know the identity of those whom they must convince. The trial judge does not know which Court of Appeal judges will hear the case, and the Court of Appeal judges do not know which Law Lords will preside over the appeal. The only certainty is that if any of the potential judges has made his view on renationalisation known in public, he would have to recuse himself.

Consider, now, the position in the legislature. If a member of the modern Labour Party were minded to renationalise the railways, he would quickly be able to discern that the proposal is doomed. It is easy to discover that, at the time of writing and likely beyond

line can very easily be redrawn. In no country that I know of has that line been redrawn so as to put fiscal policy in the hands of judges. What I offer here is one potential explanation why it might be so – it would be very costly for the judiciary to converge on an ideology that would permit them to do so.

that too, the Conservative Party commands a majority in the Commons and also that its individual members are avowedly hostile to nationalisation. The relevant point of difference between this setup and the precedential one is that, to the Labour Party Member, there is no uncertainty as to the identity and preferences of her fellow lawmakers – the cost of identifying them, and of revealing their ideological preferences, is very close to zero. Statute is better.

I come to my third example. Nationalisation and taxation are for the legislature everywhere. Abortion is different. In the United States, it was legalised through the judgment in *Roe v Wade*¹¹⁰, whereas in England this was done through the Abortion Act 1967, a statutory instrument. Which is better? If I am correct, the legislative solution is superior, for reasons of the kind discussed above – if the judiciary were minded to change the incumbent abortion law, they would have to coordinate on a number of ideological points, which to them is difficult. For the avoidance of tedium, I will not regurgitate the reasons for a third time. Instead I want to point at a practical implication. In America, it is always uncertain whether *Roe v Wade* will remain law.¹¹¹ In England, there is very little doubt that the Abortion Act is there to stay. One potential explanation is that in United States, changing *Roe v Wade* would be a matter for the courts. The ideological views of the judges on the United States Supreme Court are always to some extent obscure (though much less so than elsewhere), so that the question is one which is bound to resurface often, and especially when a new judge is confirmed.

That such uncertainty exists in the United States, where the matter is one of precedent, but not in England, where it is solved through statute, is rationalizable along the lines that I advanced here.¹¹² The cost-ineffective purpose-elicitation mechanism of the judicial system means that there is less information, and with less information the law becomes less certain – we do not know what would happen today if the question of abortion is re-examined by the Supreme Court, but we know with a fair degree of confidence what the

¹¹⁰ (1973) 410 US 113

¹¹¹ See for example Siegel, R., 'Reasoning from the Body: An Historical Perspective on Abortion Regulation and Questions of Equal Protection' (1992) 44 Stanford LR 261, or more generally the controversy in *Planned Parenthood v Casey* (1992) 505 US 833, and, more recently, *Whole Woman's Health v Hellerstedt* (2016) 579 US. Outside academia and the courts, the question of whether the next President would appoint justices who would overrule *Roe* was a live issue in the most recent American presidential election, with the two candidates taking diametrically opposed sides: see 'The Final Trump-Clinton Debate Transcript, Annotated' Washington Post (2016) https://www.washingtonpost.com/news/the-fix/wp/2016/10/19/the-final-trump-clinton-debate-transcript-annotated/?utm_term=.512e7699ea4f date accessed: 5th September 2017.

¹¹² That is not to say that the same problem is not rationalizable on *other* grounds. For example, it may be said that the issue of abortion is polemic in the United States but not in the United Kingdom because of the prevalent ideological country in each polity differs. If abortion rights were controversial in the United Kingdom, there might very well often be doubt as to whether the next Parliament would repeal the Abortion Act 1967. This would mimic the position in the US, where the doubts focus on whether a differently constituted Supreme Court would overturn *Roe v Wade*. I do not seek here to refute that explanation, but merely to supplant it: even if social attitudes in America and England were the same, it would still be more difficult to predict what a legislature would do on a point of ideology than to predict what the courts will do when faced with the same point. This is so because the ideological preferences of members of the legislature are better-known than the ideological preferences of the members of a court.

legislature would do if asked to re-examine it. For a question such as abortion, hinging as it does on mostly ideological grounds, statute is superior.¹¹³

B. The Regulation of Long-Term Risks

The second area in which statute is preferable is the regulation of long-term risks. The reader will recall that statute enjoys a qualified advantage over precedent when it comes to contingent facts. The judiciary cannot incent parties to produce information when the cost of its production exceeds the amount at stake in an individual case. Under statute, the only limit on what information can be produced is the state's solvency and its willingness to pay for its production. The legislature, then, has an advantage when two conditions are satisfied. Firstly, the production of information must be so costly that it is not feasible for individual litigants to produce it. Secondly, the production of that information would lead to the promulgation of a law that benefits all members of the polity.

Those conditions are fulfilled by many, if not all, long-term risks. By long-term risks, I mean those risks where there is a probability that a decision made in the present will have adverse consequences that only manifest themselves a long time in the future. The production of information about such risks is generally expensive: the lapse of time between action and consequence means there are many potentially confounding factors, rendering prediction and analysis laborious and inexact. Correct predictions, where possible, are very expensive to produce. For example, it is very difficult for anyone at present to say whether electronic cigarettes cause cancer, or whether new operating systems will be more vulnerable to cyber-attacks, or whether fracking will bring about environmental disaster. That the information in question is very expensive means that the likelihood of it being produced for the purposes of an individual lawsuit is low. The commission of a study that puts an accurate figure to the expected harm from fracking is likely to be very costly, whereas an individual litigant may at best hope to be compensated for harm to his home.¹¹⁴

This reasoning is not limited to fracking. It may be extended to problems as varied as nuclear waste, endocrine-disrupting chemicals, climate change, antibiotic resistance, and radicalisation. In each case, information that the lawmaker needs to produce law is mostly of the contingent fact variety: a prediction must be made about events which are likely to occur as a consequence of the adoption of some law. Moreover, for each, the consequences will only materialise far into the future. A damages award or an injunction will seldom be sufficient to incent private parties to pay for information that would avert

¹¹³ That in itself is not a novel (or uncontroversial) point. A number of authors have argued that abortion should not be a matter for the courts, though generally the critique focuses on legitimacy rather than informational economy: see Ely, J., 'The Wages of Crying Wolf: A Comment on *Roe v Wade*' (1973) 82 Yale LJ 920 and Epstein, R., 'Substantive Due Process by Any Other Name: The Abortion Cases' (1973) SCER 159. For an analysis of the legitimacy argument from the perspective of *Bush v Gore* (2000) 531 US 98, which raises similar issues, see Yoo, C., 'In Defense of the Court's Legitimacy' (2001) 68 UCLR 775.

¹¹⁴ This is similar to the point made in Shavell, S., 'The Fundamental Divergence between the Private and the Social Motive to Use the Legal System' (1997) 26 JLS 575. The same idea is also latent in Shavell, S., 'Liability and Information about Risks' (1992) 21 JLS 261 at 268, where the discussion focuses on the potential of a negligence rule to induce optimal information-acquisition.

nuclear holocaust or eradicate religious terrorism. It is best if such matters are left to the legislature.

C. The Production of Metalaws

The legislature is better suited to producing what I earlier called metalaws – laws which do not regulate any human conduct, but which instead mandate some hierarchical relationship between other laws. Suppose that a decision is made to regulate fracking so as to impose strict liability on any fracker whose actions damage the health or property of persons living in the vicinity of the fracking site. It is possible to do this by statute, say by adding an article to that effect to the civil code, and it is also possible to do it through precedent, say by holding in a negligence claim between a fracker and a homeowner that the fracker is liable irrespective of fault. In either case, we have a provision – the general negligence law – and another, which states that in cases of fracking, liability is strict. The two are hierarchically uncertain – under the standard negligence law, liability is fault-based, whereas under the fracking law, it is strict. If a fracker can show that he took reasonable precautions but a house was nonetheless damaged, we cannot, without a metalaw, tell what the outcome will be – the negligence law points to non-liability and the fracking law to liability.

The production of that metalaw has a cost, and that cost differs between the two technologies. Firstly, under statute we know that there is the law of negligence and that we are amending it to incorporate fracking – the tension between the two laws is palpable, and the lawmaker can choose to remedy it. Conversely, under precedent it might not be clear whether the judgment which finds liability for fracking is an *application* of the negligence law, in which case liability remains fault-based, or an *exception* to it, in which case liability might be strict in some cases but not in others, or whether it *overturns* the preceding judgment, in which case all negligence liability, fracking or no fracking, becomes strict. Secondly, even if the courts do hold that the fracking law is an exception, that metalaw is in itself subject to the general metalaw that a departure from precedent is only permissible in unusual cases – so the next court may very well deem the departure unjustified, and treat the exception as a nullity. No such possibility exists under statute, where to ignore the metalaw would be to contravene the express will of the lawmaker.

D. Criminal Law

It is also cost-effective for the legislature to produce criminal law. This is partly the product of metalaws. Vague criminal offences are not enforceable.¹¹⁵ Translated to the language used here, this means that there is a metalaw that fixes the applicative uncertainty of a criminal-law provisions. Of course, the word “vague” is vague itself, so that the metalaw’s operation cannot be predicted with much confidence. But as a general proposition it must be true that the applicative uncertainty of the criminal law is capped whereas that of the civil law is not. That the legal system contains a built-in control on the applicative uncertainty of criminal law means that the choice of law-production technology may safely be directed at the maximisation of hierarchic certainty. As seen

¹¹⁵ *R v Misra and Srivastava* [2004] EWCA Crim 2375. The same point likely also follows from Article 7 of the European Convention on Human Rights.

earlier, statute is more hierarchically certain than precedent. Therefore, a cost-effective criminal law would be statutory in form.

The argument might appear superfluous to civilians. Yet in England, many criminal offences originate from the common law. Some, like murder, have been codified in part. Others, like conspiracy to corrupt public morals, have not been codified at all. For a long time, it was thought self-evident that the courts could create new offences.¹¹⁶ That seems to no longer be the case.¹¹⁷ It does remain the case, however, that much of the criminal law is to be found in the law reports. There have been codification proposals,¹¹⁸ but those were not taken up by the legislature. It has been said that a penal code would be more accessible, more democratically legitimate, and fairer.¹¹⁹ If the argument that I very briefly sketched out here is correct, it would also be more cost-effective.

E. Complex Regulation

Statute is more certain hierarchically, which in turn makes statute more suitable for what I called 'complex' areas of law. By complexity, I mean the number of laws which together comprise the regulation of some activity. For example, we may say that the law of e-commerce is less complex than criminal law – the former contains a much smaller number of laws than the latter. Likewise, the law of intestacy in England is much less complex than the law of companies. The more complex a given area of law, the greater the hierarchical certainty advantage of statute. I will now give a few examples.

Let us begin with a 'simple' area of law. In the substantive chapters, I used the example of a speed limit. The law of speed limits is relatively simple – we may express it as something like 'driving at a speed in excess of 50 km/h in cities, 90 km/h outside cities, and 120 km/h on highways is prohibited, unless there is a sign indicating otherwise'. This type of law is in all countries statutory. But it could also easily be precedential, with no great loss of hierarchic certainty. It is possible for a court to say in Case 1 that the defendant was liable because he drove at over 50 km/h in a city, then to say in Case 2 that another defendant, who was driving at 60 km/h but was between cities, was not liable because the speed limit outside of cities is 90 km/h, and then in Case 3 the courts may say that a defendant who drove at more than 130 km/h on a highway was liable even though he would not have been liable had he driven at 119 km/h.

There is in this example very little need for a sophisticated metalaw, since there are very few factual patterns on which the constituent laws can overlap. We may divide the example law into four provisions, 'driving at a speed in excess of 50 km/h is forbidden in cities', 'driving at a speed in excess of 90 km/h is forbidden outside of cities', 'driving at a speed in excess of 120 km/h is forbidden on highways', and 'driving at a speed in excess of that indicated on a sign is forbidden everywhere'. Normally, the facts will fall within just one of the four laws – one is generally either inside a city, outside one, or on a highway. There is some hierarchic uncertainty, but it is easily resolvable – highways are generally

¹¹⁶ *Shaw v Director of Public Prosecutions* [1962] AC 220

¹¹⁷ *Kneller v Director of Public Prosecutions* [1973] AC 435; *R v Withers* [1975] AC 842

¹¹⁸ Law Commission, *Codification of the Criminal Law* (Cmd 143, 1985)

¹¹⁹ ATH Smith, 'Codification of the Criminal Law: The Case for a Code' [1986] Criminal LR 285; H Wechsler, 'The Challenge of a Model Penal Code' (1952) 65 Harvard LR 1097

outside of cities, but it is intuitive that the applicable speed limit is the highway one, not the general one which applies outside of cities. Likewise, a sign might stipulate a lower speed limit than that in the other three laws – but again, it is not very difficult to decide which law ought to prevail. There even though some metalaws are needed, they do not have to be sophisticated. Statute’s hierarchic certainty advantage is largely immaterial.

The position is different in ‘complex’ areas of law. Consider the law of director duties. It is not possible to describe that law in full here, so I limit myself to the names of those duties – there is the duty to act within one’s powers, the duty to promote the success of the company, the duty to exercise independent judgment, the duty to exercise reasonable skill, the duty to avoid conflicts of interest, the duty not to accept benefits from third parties, and the duty to disclose one’s interest in a transaction. In England, those have been codified – but it is easy to imagine how they were generated through precedent. In Case 1, a director might be found to have acted *ultra vires* and therefore liable, then in Case 2 a director might be found liable due to acting in bad faith, in Case 3 a director might be found not liable because he exercised reasonable care, and so on and so forth.

But unlike the preceding example, here the choice between statute and precedent is not immaterial. The duties overlap.¹²⁰ Under precedent, it is difficult to tell what their hierarchy is. For example, if a director is found to have acted *ultra vires* but in good faith, one duty points to liability and the other to non-liability. Likewise, a director can act in bad faith but with the authorisation of the company, or he might exercise his judgment independently but failed to promote the best interests in the company. On these facts, and on many others, some duties point to one outcome and others to another. Generating the duties to precedent leads to path dependency or hierarchic uncertainty – a certain hierarchy must be based on the order in which cases come before the courts, or, more realistically, that hierarchy is binding only in ‘usual’ cases. In the latter case, it is difficult to predict whether facts are ‘usual’ or ‘unusual’. Under statute, conversely, it is possible for the legislator to stipulate an order of precedence between the duties.

In England, those duties were generated by precedent, but eventually codified in the Companies Act 2006. That Act retained the common law duties and added to them several metalaws governing their duration, interrelationship, the interrelationship between the duties taken cumulatively and consent, and a delineation of the law as it applies to companies and the law as it applies to charitable organisations. The substantive content of each duty was not amended – it was simply that, taken together, they are now structured more robustly. That level of hierarchical sophistication would be either impossible or very costly to achieve on precedent.

¹²⁰ On examples of the sort of uncertainty that stems from this in the law of companies, see, among others, Brudney, V., ‘Contract and Fiduciary Duty in Corporate Law’ (1997) 38 BCLR 595, which discusses the overlap between those duties that are ‘contractual’ and those which are ‘equitable’, or Griffith, S., ‘Good Faith Business Judgment: A Theory of Rhetoric in Corporate Law Jurisprudence’ (2005) 55 Duke LJ 1, which analyses the relationship between the duty of good faith and other duties. There is also a tension between the duty of loyalty and the duty to act in the best interest of the company (or trust) – see *Keech v Sandford* [1726] EWHC J76 and *Guth v Loft Inc* (1939) 5 A2d 503 for two very famous examples. The problem is analysed in depth in Langbein, J., ‘Questioning the Trust Law Duty of Loyalty: Sole Interest or Best Interest?’ (2005) 114 Yale LJ 929.

The Companies Act is also useful because it highlights an important temporal point: when an area of regulation is nascent, as was the case with director duties in the nineteenth century¹²¹, precedent and statute are in respect of hierarchic uncertainty equal. And other considerations – applicative certainty or information costs – may have pointed to precedent. It is very likely that delegating directors’ duties to the courts was efficient in the nineteenth century. But since there is in every case the possibility that the courts will generate a new law, a precedential body of law inevitably grows more complex over time. As the law grows in complexity, its hierarchic uncertainty increases, as does the need for a sophisticated metalaw. There comes a time when codification becomes necessary.¹²² The long-term tendency, then, is always to statute.

IV. Ending

It is on this note that I propose to at last end this conclusion, and with it the entire volume. I began with the general framework of these papers. Law is an exercise in production in which information is converted into law through either precedent or statute. I divided the input, information, into three categories: brute facts, contingent facts, and purposes. On the output side, I distinguished between applicative and hierarchic uncertainty. I then argued that statute is better for contingent facts, for purposes, and for hierarchic certainty. Precedent, conversely, is better for brute facts and applicative certainty.

These arguments, if they are convincing, are important because they run contrary to the ‘efficiency of the common law’ hypothesis. That literature argues that judge-made law has an innate tendency to efficiency, and that it must therefore outperform the civil law. On my argument, the judiciary’s advantage is at best conditional. There is no reason to think that statute is always inferior – in many cases it is better. All depends on how individual lawmaking competences are assigned within particular polities – if, say, brute-fact intensive areas are assigned to the judiciary and hierarchically uncertain laws are assigned to the legislature, the system would be more efficient than if it is the other way around.

That was the argument of the main chapters. In the conclusion, I added to it some potential applications of my theory to practice. I posited that the courts are more suited to areas that are technical and unideological, such as laws on notice and title, and also to new forms of delivering services, such as the gig economy. Statute, on the other hand, is superior for long-term risks – fracking, environmental hazards, and such like – and also for ideologically divisive issues, such as taxation, nationalisation, and abortion. I also rehashed the point that statute is better for complex law. Since complexity under precedent is always increasing, there always exists a point in time at which the codification of judge-made law becomes desirable. If this is right, then the right question to ask is not whether codification is good or bad, but rather whether the time is ripe for

¹²¹ Langbein, J., ‘The Contractarian Basis of the Law of Trusts’ (1995) 105 Yale LJ 625, 637-40 gives a historical overview of the transition to managerial trusts, on which modern company law is based. The case law which developed between the reign of Victoria and the Companies Act 2006 is too voluminous to be summarised here: the critical cases are said to be *Aberdeen Railways v Blakie Bros* (1854) 1 Macq 641; *Cook v Deeks* [1916] 1 AC 554; *Regal Hastings v Gulliver* [1942] UKHL 1; *Re Smith & Fawcett* [1942] Ch 304; *Hogg v Cramphorn* [1967] Ch 254.

¹²² On the reasons for the English codification, which I have understandably not sought to describe here in full, see Company Law Steering Group, *Completing the Structure* (2000 BERR).

it. I have not sought here to answer that question for individual areas of law – that is a matter of context, and one to which I hope to return in the future. But I hope that the reformulation in itself represents a small step forward in the literature.

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SUMMARY

This volume comprises nine essays. All nine deal with one question – should we have laws made in courts or in parliaments? I say that it depends – courts are good for some laws, parliaments for others. I conceptualise law as an information product, and lawmaking as an exercise in production. Lawmaking has inputs and outputs, and technology is used to transform one into the other. The input is information – to make laws, we need to know what the world is like right now, how it may change, and what we desire it to be. The output is law. Law may, depending on input and technology, take on different forms: it can be vague or it can be certain. The ‘technologies’ between which we may choose are precedent and statute. Differences between the two being sizeable, our choice has significant repercussions for the cost of the input and the form of the output.

I apply this framework to a number of problems, including the comparison between the common and the civil law, legal history, comparative civil procedure, and EU law. Perhaps most critically, I offer a critique of the ‘efficiency of common law’ hypothesis. That literature argues that judge-made law has an innate tendency to efficiency, and that it must therefore outperform the civil law. On my argument, the judiciary’s advantage is at best conditional. There is no reason to think that statute is always inferior – in many cases it is better. All depends on how individual lawmaking competences are assigned within particular polities. And even if precedent has a decided advantage in respect of some particular corpus of law, that advantage diminishes with time as judge-made law grows more hierarchically uncertain. If this is right, then there cannot be a presumption against codification. The right question to ask, instead, is whether the time is ripe to codify precedent.

SAMENVATTING

Deze bundel bevat negen essays. Alle negen gaan over dezelfde vraag – moet recht gemaakt worden in de rechtbank of in het parlement? In dit proefschrift wordt betoogd dat het antwoord op deze vraag genuanceerd is: voor bepaalde rechtsregels is de rechtbank de beste keuze, voor andere het parlement. Ik beschouw recht als een informatieproduct, en wetgeving als een productieproces. Wetgeving kent input en output en met behulp van technologie wordt het een omgezet in het ander. De input is informatie - om recht tot stand te brengen moeten we weten hoe de wereld er nu uitziet, hoe deze verandert en hoe wij willen dat de wereld eruit gaat zien. De output is de rechtsregel. Rechtsregels kunnen, afhankelijk van input en technologie, verschillende vormen aannemen: zij kunnen vaag zijn of heel duidelijk. De 'technologieën' waartussen we kunnen kiezen zijn precedentwerking en formele wetgeving. De verschillen daartussen zijn groot en onze keuze heeft grote gevolgen voor de kosten van de input en de vorm van de output.

Ik gebruik dit kader voor een analyse van verschillende problemen, waaronder de vergelijking tussen de common law en het civil law, de rechtsgeschiedenis, vergelijkend burgerlijk procesrecht en EU-recht. Wellicht het belangrijkste is dat ik een kritische analyse bied van de hypothese van 'de efficiëntie van de common law'. De literatuur stelt dat door rechters gemaakt recht in essentie efficiënter is en dat rechtersrecht daarom beter is dan het civil law systeem dat meer op wetgeving is gebaseerd. Ik ben echter van mening dat er hier slechts onder bepaalde voorwaarde sprake is van een voordeel. Er is geen reden om in het algemeen te veronderstellen dat formele wetgeving minder goed is - in veel gevallen is het juist beter. Het hangt allemaal af van wie er binnen bepaalde bestuursvormen de wetgevende bevoegdheden hebben. En ook al heeft rechtersrecht voor bepaalde rechtsregels een duidelijk voordeel, dat voordeel neemt in de loop der tijd af naarmate de hiërarchische onzekerheid van door rechters gemaakte rechtsregels toeneemt. Als dat inderdaad het geval is, dan kan er geen bezwaar zijn tegen codificatie. Integendeel. De juiste vraag is dan of de tijd er rijp voor is om rechterlijke uitspraken te codificeren.

Curriculum vitae

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Short bio	
<p>I am a final-year PhD student at the European Doctorate of Law and Economics, a doctoral programme convened jointly by Erasmus University Rotterdam, the University of Hamburg, and the University of Bologna. I received my LLM in 2013 from the University of Cambridge and my LLB from the University of Durham in 2011. My research interests include jurisprudence, law-and-economics, and the law of contract.</p>	
Education	
PhD European Doctorate of Law and Economics	2018
LLM University of Cambridge	2013
LLB (ELS) University of Durham (KU Leuven)	2011
Work experience	
Yalnuzov Law Office	2011-2; 2013-4
Freelance Translator	2005-12
Prizes and awards	
LM Burnett Prize (University of Cambridge)	2013

EDLE PhD Portfolio

Name PhD student :	Orlin Yalnazov
PhD-period :	2014-2018
Promoters :	Michael Faure, Florian Faust, Elena Reznichenko

PhD training

<i>Bologna courses</i>	<i>year</i>
Behavioural Game Theory	2015
Economic Analysis of Law	2015
Enforcement Mechanisms	2015
Experimental Law & Economics	2015
Game Theory	2015
<i>Specific courses</i>	<i>year</i>
Seminar 'How to write a PhD'	2015
Academic Writing Skills for PhD students (Rotterdam)	2015
Seminar Series 'Empirical Legal Studies'	2015
Seminar 'How to Make a Presentation'	2015
Elocution Class	2015
<i>Seminars and workshops</i>	<i>year</i>
Bologna November seminar (attendance)	2014
BACT seminar series (attendance)	2015
EGSL lunch seminars (attendance)	2015
Joint Seminar 'The Future of Law and Economics' (attendance)	2014
Rotterdam Fall seminar series (peer feedback)	2014
Rotterdam Winter seminar series (peer feedback)	2015
<i>Presentations</i>	<i>year</i>
Bologna March seminar	2016
Hamburg June seminar	2015
Rotterdam Fall seminar series	2015
Rotterdam Winter seminar series	2016
Bologna November seminar	2014
Joint Seminar 'The Future of Law and Economics'	2017
Spanish Association of Law and Economics	2017
Polish Law and Economics Conference	2017
Italian Society of Law and Economics	2016
Maastricht European and Private Law Institute Talk Series	2016
European Association of Law and Economics	2016

Contract Law in a Liberal Society Workshop	2015
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