# LEGAL REASONING AND LEGAL INTEGRATION

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## 1 Introduction

Asking the right question is half of the answer. This valuable insight is not only applicable to problems in our daily lives, but also – and maybe even more – in scientific research. Jurisprudence is no exception here, and many a jurisprudential discussion has benefited from somebody asking the right questions. In the author's opinion, the main virtue of legal theory in its old fashioned sense of applying techniques from analytical philosophy to jurisprudential issues, is that it helps asking the right questions. Given the right questions, 'ordinary' legal knowledge often suffices to answer them. The purpose of this paper is to illustrate this general point by showing how techniques from modern legal logic can benefit the actual discussion about European legal integration.

A few years ago, Pierre Legrand (1997) published an eloquent argument against the introduction of a European Civil Code as a means to achieve integration of European private law. His argument rests on two pillars. One is that integration is not desirable. The other one is that integration cannot be achieved by means of a uniform European Civil Code. Legrand criticizes the proposal in favour of a European Civil Code on four grounds, one of which (the relevant one for our purposes) is that such a code 'would fail to effect the universal reach for which it stands'. The presence of one and the same code cannot lead to the same law if this code is to operate within two fundamentally different legal cultures, namely the cultures of civil law and of common law.

Legrand writes in this connection of two different *mentalités*. On the one hand there is the mentalité of the civil law tradition. According to Legrand, using an analysis of Pitkin, the civil law tradition takes abstract rules as the starting point for decision making and sees decision making as 'deductive in the sense that the rules that structure it are posited prior to the practices that apply it'.[2] The common law tradition, on the contrary, takes its starting point in concrete cases. When reference is made to an old case in order to decide a new one, the old case is not abstracted into a general rule, but is rather taken integrally, that is with all its factual details in place. Legrand quotes Samuel in this connection: 'legal development is not a matter of inducing rules, terms or institutions out of a number of factual situations. Rather it is a matter of pushing outwards from within the facts themselves.'

These descriptions of the civil law tradition and the common law tradition are highly abstract. Legrand takes the effort to describe the supposed differences more extensively, but his argument retains its highly abstract level all the time. Maybe an example can make the same point in a more down to earth fashion.

### THE CASE OF THE MURDEROUS SPOUSE

A rich old lady was nursed by a poor young man. After some time the two married, without making any special arrangements about their properties. According to the Dutch law, this meant that their properties were joined together and became their common property.

[1] The author wishes to thank Jan Smits for valuable comments that made it possible to clarify some obscure parts in the argument of this paper. Whether this possibility to clarify has succeeded is left to the judgment of the reader. Anyway, the author is the only person responsible for remaining obscurities and errors.

[2] Compare in this connection also Smits (2002), p. 82 on the syllogistic nature of legal reasoning in the civil law tradition.

Not long after their marriage the young man murdered his wife. He was punished for the murder, but that is not the issue at stake. The issue was whether he could receive half of the marital estate because the marriage had ended. That he could not *inherit* the other half was clear, because of a statutory rule stating that somebody cannot inherit from a person he murdered. The Dutch legislation does not contain a special rule for the division of the marital estate in case a husband murders his wife, however.

The seemingly innocent observation that the Dutch legislation does not contain a special rule for the division of the marital estate in case a husband murders his wife, gives rise to a difficult discussion. It is clear that the Dutch law does not contain a *written* rule that deals explicitly with the division of the marital estate in case one spouse murdered the other one. It is less clear that the Dutch law does not contain any rule dealing with this issue. If one assumes that a legal system has a rule for a particular type of situation if it has a solution for that kind of situation, one might well argue that there many cases that lack a suitable written rule are nevertheless governed by some legal rule. The presence of a legal rule is then identified with the existence of a legally correct solution for a particular type of case. This view is defensible, but has the disadvantage that it diffuses the difference between rules that were made to deal with some type of case and the legal solutions for types of cases, that are sometimes based upon rules in the just mentioned sense.[3] When I use the expression 'rule' in this paper, I refer to rules that were explicitly made, and not to legal solutions for types of cases.

Let us grant Legrand that in common law style reasoning there is ample room to deal with a case like the one of the murderous spouse in the proper way and that it is relatively easy to decide that the murderer should not receive half of the marital estate. If we may believe Legrand, such a solution would be hard to reach in a civil law tradition, however. There is in Dutch law only one rule that is by and large relevant, and it states that if a marriage ends, the marital community of properties is divided between the partners (and if one of the partners has deceased, her portion is taken by her inheritors). This rule determines which facts of the case are relevant, and these facts are merely that the marriage has ended (by the dead of one of the spouses). That the marriage ended because one spouse killed the other is not relevant, because the rule in question does not mention this fact. The relevant rule selects which facts are relevant, and because the rule was 'posited prior to the practices that apply it' it could not take into account that the remaining spouse murdered the deceased one. On civil law style reasoning this would mean, at least according to Legrand, that the murderer would receive half of the marital estate.

Legrand might escape this conclusion by resorting to the view that rules are what I called 'legal solutions for types of cases'. On this broad view of rules, civil law systems might have a suitable rule for this type of case, although an unwritten one. Such a rule would be adapted to the needs of the case at hand and would lead to the conclusion that the murderous spouse would not receive half of the marital estate. However, if Legrand would take this way out, his argument about the difference in mentality between the common law system and the civil law system loses its edge, because then rules would not be posited prior to the cases to which they are to be applied.

Let us therefore assume that the difference between civil law and common law really operates in the way Legrand suggests. Then Legrand would be right that the difference in *mentalité* between the civil law and the common law tradition would devastate the effects of a common civil code. I will argue, however, that the difference does not operate in this way, and as a consequence, Legrand's argument is not so strong as it might seem at first sight. Lat-

[3] This is approximately the same distinction as the one made by Kelsen between 'Rechtsnormen' and 'Rechtssätze' (Kelsen 1960, p. 73f.), and by Alchourrón and Bulygin (1981) between the expressive and the hyletic conception of norms.

er in this paper I will return to the case of the murderous spouse, and the way it was really dealt with in the Dutch civil law tradition. But first I must set out the path of the paper.

I will argue that Legrand's argument hinges on the issue whether the law is an open system. In fact, his argument can be interpreted as stating that in a case-based system, the law is necessarily open, while in a rule-based system it is necessarily closed. This difference between a case-based approach and a rule-based approach makes that the introduction of a European civil code would not lead to uniform private law.

Legrand's argument might also be interpreted differently, namely as stating that common law systems just *happen* to be more open, without endorsing the view that this openness derives from common law systems being case-based. On this interpretation, the argument of this paper loses much of its force, but the same counts for Legrand's argument, because it would not have presented any reason *that*, let alone *why* common law systems happen to be more open. So the argument of this paper has two versions, directed against two interpretations of Legrand's theory. If Legrand does not presuppose that the difference in style of reasoning between the common law tradition and the civil law tradition stems from the difference between case-based reasoning and rule-based reasoning, his own argument is unfounded. However, if his argument is based on the assumption that the difference in style of reasoning between the common law tradition and the civil law tradition stems from the difference between case-based reasoning and rule-based reasoning, this paper shows his assumption to be misguided. In both cases, Legrand's argument is refuted.

After a brief discussion of what the open nature of the law amounts to, I will elaborate Legrand's argument to show why the law might be open in common law, and closed in civil law. I then resume my argument against Legrand by showing how the logic of rule application allows a civil law system to be open too. In this connection I will draw from recent results in the field of legal logic, and in particular the analysis of legal reasoning by means of so-called defeasible logics. The conclusion here will be that the mere fact that a civil law system works with rules instead of cases, does not imply that such a system must be closed. It depends on other factors how open a rule-based legal system will be.

With this conclusion, Legrand's main argument has been refuted. What remains to be done is to show how a civil law system may be more or less open and say a little about the reasons that play a role in this connection. The same reasons are, I will argue, also relevant for common law systems.

## 2 The law as an open system

One of the advantages of having a legal system, as opposed to deciding all cases on grounds of fairness, is that a legal system offers a higher degree of predictability of the outcomes. By indicating which facts of a case are legally relevant and in which way they lead to a particular outcome, it becomes easier to predict what the outcome of a case will be and this predictability makes social interaction easier. Fuller (1969, p. 33f.) has even argued that a minimum amount of predictability is necessary for the very existence of a legal system.

At the same time the limitation of legally relevant facts makes it sometimes impossible to take facts into account that seem relevant if one would not limit one's view to what is deemed relevant by the law. Legal reasoning is not only applying the relevant law to a case, but also a special case of practical reasoning, in the sense of deciding what to do (Alexy 1978, p. 263; 1999). From this perspective, the limitation of facts that can be taken into account as relevant for the decision at stake to only a pre-established set, is against the nature of the law, because it is not rational to leave potentially relevant facts out of consideration. Here we encounter a fundamental tension with which every legal system has to cope, and it is this tension that is reflected in the issue to what extent a particular legal system is open.

A legal system is more open in the sense that is relevant here, to the extent that it allows more facts to be recognised as legally relevant that prima facie seemed to be irrelevant. As said, one of the points of having a legal system is that it distinguishes between facts that are relevant and facts that are not relevant for the solution of particular cases. Moreover, this distinction between relevant and irrelevant facts should be made before the cases arise to which the distinction is to be applied. If every case should be decided on all facts that are ex post deemed relevant, one might have a reasonable way to deal with these cases - although even this reasonableness can be disputed - but it is not a legal way. Having a legal system implies by definition an a priori determination of what counts as relevant in the eyes of the law (Fuller 1969, p. 49f.; Radbruch 1973, p. 164f.).

The question at stake concerning the openness of a legal system is how strict this determination is. If it is not strict at all, in a degree that the a priori determination of what counts as legally relevant has no practical meaning, the system in question is not a legal system anymore. If the determination is very strict, in the sense that it does not allow any exceptions, the legal system in question is closed. It is questionable whether such a closed system can function, given that the law is used to decide what should be done all things considered (Hage and Peczenik 2000). In reality, all legal systems are to some extent open. They allow some exceptions to the a priori determination of what counts as legally relevant, but they do not allow unlimited exceptions. The degree of openness of a legal system depends on the extent to which it allows exceptions.

If we may believe Legrand, a common law system allows principally more exceptions to the a priori determination of what is legally relevant, than a civil law system. In order to evaluate this claim, we must take a closer look at both the 'logic' of case-based reasoning and the 'logic' of rule-based reasoning. In the next section I will introduce some logical distinctions by means of which this closer look can be taken.

## 3 Of reasons and their logic

If we have a suitable conceptual framework, the differences between common law style reasoning and civil law style reasoning are easier to understand. In this section I will try to develop such a framework in the form of reason-based logic. Reason-based logic is one example of so-called defeasible logics that have been developed in research on artificial intelligence to deal with rules of thumb and exceptions. In contrast to other defeasible logics, reason-based logic has been developed especially to deal with the peculiarities of reasoning with legal rules and principles (Verheij 1996; Hage 1997).

### 3.1 Reasons

A central notion in reason-based logic is that of a reason. I take all reasons to be facts, that is those part of reality that make true sentences true. For instance, if the sentence 'It is raining' is true, it is made true by the fact that it is raining. I take everything denoted by a true that-phrase as a fact. This implies that I allow facts without a material basis, such as the fact that five is bigger than three and facts that are only possible on the basis of rules, such as the fact that courts have the power to sentence and the fact that a debtor ought to pay his debts.[4] Clearly I thereby allow the presence of facts that can only obtain within the context of a legal system.

Some facts are relevant for the presence of other facts. For instance, the fact that John owns a book is relevant for the fact that he is permitted to tear the book in pieces. This kind of relevance is expressed by the word 'reason'. The fact that John owns the book is the reason

[4] Amongst others because of a misguided parallel between ought-sentences and commands, there have been doubts whether ought sentences ('norms') can be true or false. I adopt the view here that at least some ought sentences have truth values. For details, see Hage 1997, p. 70 and Hage 1999.

why he is permitted to tear it apart and the fact that Lea is imprisoned is the reason why she cannot cast a valid vote.[5]

The word 'reason' can be used in other senses too, but the sense used above is the sense of 'reason' that I am interested in here. Reasons in this sense are *facts that make that other facts obtain or do not obtain*. I will call the fact for which a reason 'pleads', the *conclusion* of the reason. So the fact that John owns a book is the conclusion of the reason that Gerald transferred the ownership of this book to John.

Reasons can be subdivided into decisive reasons and contributive reasons. A *decisive reason* guarantees the presence of the fact for which it is a reason, or the absence of the fact against which it is a reason. For instance, the facts that there are two dogs, three cats and no other animals in the room are together a decisive reason for the fact that there are five animals in the room. Similarly, the fact that the only force that operates on a body is gravitational is a decisive reason why this body is accelerated in the direction of the gravitational force.

*Contributive reasons*, on the contrary, do not guarantee the facts for which they 'plead'. They merely contribute to their presence. For instance, if Jane promised to visit Geraldine, this is a contributive reason why she should visit Geraldine. Whether she should visit Geraldine all things considered, depends on the presence of other reasons.

> First, if there is a decisive reason why she should not visit Geraldine, then she should not visit Geraldine. Second, if there are contributive reasons not to visit Geraldine, and if these reasons against visiting outweigh the reasons for visiting, she should not visit Geraldine either. However, if there are no reasons against visiting Geraldine, or if the reasons against visiting are outweighed by the totality of reasons for visiting, Jane should visit Geraldine.
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> The logic of reasons involved here is summarised in the appendix of this paper.

A crucial aspect of contributive reasons is that *they have to be weighed* against contributive reasons pleading in a different direction. This weighing often comes down to taking a decision which set of reasons outweighs the other set. Sometimes, but not always, this decision can itself be guided by reasons. For instance if two sets of reasons have been weighed before, the outcome of the earlier decision can count as a precedent for the new decision. (The same reasons must be weighed in the same way.) There may also be reasons concerning the weight or even the relevance of other facts as reasons. Take for instance the following example[6]:

> A small supermarket had to dismiss one of its employees for financial reasons. For this dismissal, the allowance of a judge was necessary. One of the employees, called Mary, had been longer in service, and this is a reason for the judge not to permit to dismiss her. The other employee, called Richard, had better papers for the job, and this is a reason not to dismiss him. Since it is clear that one of the employees has to be dismissed for financial reasons, a reason against permitting the dismissal of Richard is also a reason for permitting the dismissal of Mary.
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> The judge decided that, although Richard had better papers for the job, Mary was still sufficiently qualified, so that the better papers did not count for much. The fact that Mary had been longer in service should therefore tip the balance of reasons. Notice that the fact that Mary was suitable for the job was not considered as a reason not to dismiss her, but only as a reason why the seniority of Mary outweighs the better papers of Richard.

### 3.2 Rules

Rules are usually assumed to have a conditional structure. They consist of a condition part and a conclusion part, and the point of rules is that if their conditions are satisfied, their conclusions obtain. Take for instance the main Dutch rule of tort law, that states effectively that if somebody commits a tort, and this tort can be attributed to its actor, the actor is liable for the

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[5] Sometimes a reason consists of more than one fact. For instance, the facts that Frank committed a tort and thereby caused damages are together a reason why Frank is liable for the damages. Neither one of these facts would, taken on its own, be a reason, but in combination they are a reason for the existence of liability.

[6] Kantongerecht Rotterdam, June 12th, 1985

damages caused by his act. Formulated in this way, the rule has two conditions that are necessary for its conclusion to obtain.

If a rule applies to a case, the conclusion of the rule holds for this case. In terms of reasons, we might say that the application of a rule to a case is a decisive reason for the rule conclusion to hold. This leaves the question unanswered, however, *when* a rule applies to a case. The standard situation when a rule applies is when the case satisfies the conditions of the rule. So, to stick with out analysis of the Dutch rule of tort law, if A committed a tort, and this tort can be attributed to A, the rule applies to A's case, and the conclusion follows that A is liable for the damages caused by his act. This standard situation is the one intended by the legislator who formulated the rule this way. It is also the normal situation in which the rule applies.[7]

### 3.3 Principles

Legal principles come in at least two main types. On kind of principles resembles rules in that they exhibit the same conditional structure that is also characteristic for rules. I will call them *rule-like principles*. The other kind of principles function like goals, and for this reason I will call them goal principles or, briefly, *goals*.

Typical examples of rule-like principles are the principles that nobody can transfer a right that he has not got himself (nemo plus principle), the principle of the rule of law (the government has no power unless it was explicitly assigned by (written) law), and the principle that any act that violates a criminal law is tortuous. Rule-like principles differ from rules in that their application to a case does not generate a decisive reason for their conclusion, but merely a contributive reason. As a consequence, the conclusion of a principle still needs to be balanced against other reasons, if there are any. For instance, a violation of a criminal law is in principle tortuous, but if there were sufficiently urgent reasons to commit this violation (a matter of balancing), the violation was justified and the act was not tortuous. In the rest of this paper I will disregard rule-like principles.

*Goal principles* state goals that the law strives to realize as much as possible, within the confines of what is physically and legally possible (Alexy 1996, p. 75f.; 2000). Examples are human rights, but also governmental policies (e.g. full employment) and legal principles such as party autonomy and consumer protection in contract law. Goals are related to rule-like principles in that are merely the basis of contributive reasons. If some regulation or decision contributes to a goal, this is a contributive reason to adopt this regulation or to take this decision. This contributive reason still needs to be balanced against possible contributive reasons against the regulation or decision.

> For instance, that the prohibition to publish a photograph of a recently released prisoner promotes the privacy of this prisoner is a contributive reason to prohibit the publication. This reason still needs to be weighed against a contributive reason for allowing the publication, based on another goal, namely the freedom of the press.[8]

## 4 The subsumption model of rule-based reasoning

According to Legrand, rule-based reasoning allows much less leeway to adapt the law to the needs of the case at hand. Legrand sees rule-based decision making as 'deductive in the sense that the rules that structure it are posited prior to the practices that apply it'.

This phrasing is somewhat ambiguous. On the one hand it may merely mean that legal decision making can be divided into two stages. In the first stage a rule is formulated, based on the sources of the law and the needs of the case at hand, while in the second stage this rule is applied deductively to the case. This view has often been defended in the literature, under the headings of the distinction between heuristics and legitimation (Nieuwenhuis 1976), second-

[7] In section 5, I will discuss some less normal situations.

[8] Cf. Alexy 1996, p. 84f.

ary and primary justification (Alexy 1978, p. 273f.; MacCormick 1978, p. 101f.), or internal and external evaluation of law application (Wróblewski 1992, p. 62f.).[9]

On the other hand it may mean that pre-given rules are processed in a blind way, more or less like if it were done by a computer program, without taking the needs of the case at hand into consideration. It seems that Legrand has this way of 'deductive' rule application in mind, because otherwise the rest of his observations is not to the point. Let us call this view of rule application the *subsumption model*. According to this subsumption model the logic of rule application is the following:

1. Determine whether the facts of the case at hand satisfy the conditions of the rule.
2. If the answer is affirmative, the rule applies and the rule consequences are attached to the case.
3. If the answer is negative, the rule does not apply and the rule consequences are not attached to the case.

The only step in this model that allows some leeway to adapt the legal consequences to the needs of the case in question is the first one, because it requires interpretation of the rule conditions and classification of the case facts.[10]

As a model of how reasoning with rules works, the subsumption model is not correct. In particular it cannot account for the possibilities to make exceptions to rules and to apply rules analogously. Clearly there have been attempts in the literature on law and logic to fit exceptions and analogous rule application into the subsumption model[11], but the upshot of these attempts has always been that the rule does not run as it seems to run given its wordings. Either it contains an additional condition that is not satisfied by the case at hand (to account for exceptions), or its conditions are actually more general than the wordings suggest (to account for analogous application). Such attempts to argue that rules do not run as they seem to run at first sight are not to be recommended, because they misinterpret what goes in on legal reasoning to make the reasoning fit a preconceived, but wrong model.[12]

It is therefore better to replace the subsumption model of rule application by a more realistic one. In this connection I want to propose the reason-based model of rule application.

## 5 The reason-based model of rule application

The reason-based model of rule application has as its starting point two assumptions. The first one is that if a rule applies to a case, its conclusion is attached to that case as a legal consequence.[13] For instance, if the rule that he who commits an attributable tort is liable for the damages caused by the tort, applies to a case, the tortfeasor is liable for the damages caused by his tort.

The second assumption is that whether a rule applies depends on a balance of reasons for and against application. To elaborate the same example, this means that whether the rule that he who commits an attributable tort is liable for the damages caused by the tort, applies to a case, depends on both the contributive reasons pleading for application and the contributive reasons against application, and therefore *not merely on whether the rule conditions are satisfied*.

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[9] This view also seems to treat rules as legal solutions for types of cases in the sense of note **Fout! Bladwijzer niet gedefinieerd.**.

[10] Arguably, an important objection against the subsumption model, apart from that it is not faithful to legal practice, is that it places a too heavy burden upon legal interpretation, thereby leading to 'interpretations' that can only with the greatest difficulty be called so.

[11] See for instance Zippelius 1974, p. 41 and 69

[12] A more extensive discussion of these matters can be found in Hage 1997, p. 4f.

[13] This might be interpreted as 'all or nothing application' in the sense of Dworkin 1978, p. 24.

The first assumption is not really different from the subsumption model, but the second one makes a crucial difference, because it

1. it allows reasons against the application of a rule that compete with reasons for application, and
2. it does not state in an a priori fashion which facts count as reasons for or against application.

In particular the second characteristic of the reason-based model makes that reasoning with rules according to this model is very well compatible with a relatively open system of the law. Let me elaborate a bit on the reason-based model of rule application, to justify this claim.

Although the reason-based model as described above does not specify which facts count as reasons for and against application of a rule, there are very plausible ways to extend this model. I will discuss three of such extensions.

### 5.1 The first extension of the reason-based model of rule-application

The first extension is to assume that if the facts of a case satisfy the conditions of a rule - I will say that the rule is *applicable* to the case - this is merely a *contributive* reason why the rule applies.[14] Again, this looks similar to the subsumption model, but there is a crucial difference, because on the subsumption model, the applicability of the rule is a *decisive* reason to apply the rule. What does this difference mean?

*First*, it means that even if a rule is applicable, there may still be reasons against applying the rule, reasons which may, but need not, outweigh the applicability of the rule as a reason for application. This might, for instance, be the case, if application of the rule would be against the purpose of the rule.

> Fuller gave an example of a prohibition to sleep in the railway station, which was motivated by the desire to retain tramps from spending their night on the station (Fuller 1958). It would be against the purpose of this rule to apply it to the traveller who dozed away a few minutes while waiting on a late train, because this would not contribute to the goal of retaining tramps from spending their nights on the station.

If application of a rule to a case would be against the rule's purpose, this is normally a contributive reason against application of the rule. Normally a rule is not applicable to cases where application would be against the rule's purpose. If the rule is nevertheless applicable, there are both a reason for, and a reason against applying the rule to that case. The demands of legal certainty plead for the conclusion that the applicability of the rule outweighs the fact that application would be against the rule's purpose, but this demand is not decisive (merely a contributive reason why applicability outweighs its competitor) and the balance of reasons might be that the reason against application of the rule outweighs the reason for application. The rule does not apply then, and does not attach its conclusion as a legal consequence to the case.

*Second*, it means that there can be a decisive reason against application of the rule, and such a decisive reason by definition brings about that the rule does not apply, even if it is applicable. A decisive reason against application of an applicable rule obtains, for instance, if another rule with an incompatible conclusion is also applicable to the case and this second rule has precedence over the first rule.

> In Dutch rental law, the rules concerning the rent of business accommodations are sometimes in conflict with the general rules about rent, and if such a conflict occurs, the more specific rules concerning the rent of business accommodations have precedence over the general rules about rent. The applicability of a rule that has precedence over another rule is normally a decisive reason against applying the latter rule.

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[14] Notice that the applicability of a rule is not the same as its application. The point of the reason-based model is that applicability is merely a contributive reason for application.

*Third*, the first extension means that if a rule is applicable, and there exists therefore a contributive reason for applying the rule, and there is no reason, either contributive or decisive, against application, the rule certainly applies, and its consequence is attached to the case. *This is the normal situation and in this situation the reason-based model and the subsumption model of rule application lead to the same results.* It is this kind of situation that has lend some plausibility to the subsumption model, because the shortcomings of that model are not relevant in the normal situation.

### 5.2 The second and third extension to the reason-based model of rule-application

The second extension to the reason-based model of rule application is that *if a rule is not applicable to a case, this is a contributive reason against applying the rule to this case*. At first sight this extension seems superfluous, because if a rule is not applicable, there seems to be no reason for applying it, so the issue of application seems not to arise at all. The relevance of the second extension only becomes clear in the light of the third extension of the reason-based model of rule application.

This third extension is that *there can be other reasons for applying a rule than only the applicability of the rule in question*. The reason-based model itself does not specify what these other reasons might be; it only leaves the possibility open that there are other reasons for application.

Reasons to apply a rule to a case even if its conditions are not satisfied will usually be based on application of principles or goals that led the legislator to make the rule in the first place. This means that the case belongs to a type that is similar to those for which the legislator had the rule in mind. The cases to which the rule is applied, although the rule conditions are not satisfied, will therefore normally resemble cases to which the rule is applicable. That is why we normally speak of *analogous application* of a rule, if a rule is applied to a case in which it is not applicable.[15]

The reasons to apply a rule analogously must always be weighed against the non-applicability of the rule as a reason against application. Legal certainty provides again a contributive reason why the non-applicability as a reason against application outweighs the reasons for analogous application, but in the end the conclusion may nevertheless be that the rule should be applied analogously.

## 6 The two-layer model of the law

An important question to be raised about legal reasoning is why rules lead to decisive reasons. The presence of a decisive reason means that contributive reasons for the opposite conclusion are not even taken into account, which is at first sight irrational. An attractive answer to this question has been offered by Raz, who compared rules[16] with decisions. Decisions are, ideally, based on weighing the contributive reasons for and against a particular course of action. Having taken the decision, the decision maker does not need to weigh the contributive reasons again. Instead she can rely on the decision, that comes instead of the original contributive reasons that went into the decision (Raz 1975, p. 65f.).

Analogously, rules come instead of the contributive reasons that went into the decision to make them. Rules

[15] A more extensive discussion of analogous rule application can be found in Verheij and Hage 1994 and in Hage 1997, p. 118f.

[16] Actually Raz's discussion is confined to reasons for action and as a consequence also to rules that prescribe behaviour (mandatory norms). There is no fundamental reason to restrain Raz's argument to behaviour guiding rules, however.

'mediate between deeper-level considerations and concrete decisions. They provide an intermediate level of reasons to which one appeals in normal cases where a need for a decision arises. Reasons on that level can themselves be justified by reference to the deeper concerns on which they are based'.

Moreover, the force of rules

'… is completely exhausted by those underlying considerations. Contrariwise, whenever one takes a rule or directive as a reason one cannot add to it as additional independent factors the reasons which justify it'.

So, rules can be seen as a kind of summaries of the reasons that went into making them. But there is more, because

'through the acceptance of rules setting up authorities, people can entrust judgment as to what is to be done to another person or institution…' (Raz 1986, p. 58/9).

Given this account of the relation between rules and the contributive reasons underlying them, the reason-based logic of rules as described above can easily be explained and justified. If a rule applies in a case, this is a reason to decide the case in accordance with the rule. The contributive reasons pleading for or against this decision have lost their force because they were summarised in the rule. There is no need to weigh reasons anymore and the rule decides the case. That is why application of a rule leads to a decisive reason.

However, a rule only replaces the reasons that went into it. Possible other reasons, that were not taken into account in making the rule, still have force.[17] If in an actual case such reasons are present, the case cannot be decided anymore by means of the rule alone. Instead the contributive reasons for and against the projected solution have to weighed. If the outcome of this weighing process is that another decision than that suggested by the rule should be taken, there is an exception to the rule, and the rule does not apply.[18]

I will adapt a rule from Dutch private law to illustrate this point. The rule at stake is to be found in article 3:86 of the Dutch Civil Code and deals (amongst others) with the situation that somebody, acting in good faith, obtained through transfer a moveable property from another person, who did not have the power to transfer (in general: not the owner). The rule runs (approximately) that if the property was not stolen and if the receiving person acted in good faith and had to pay for the transferred property, he would become the new owner.

This rule balances the interests of the original owner (he loses his property only in special circumstances) and the receiving party who acted in good faith (who gains property when he most 'deserves' it). Suppose, however that (contrary to reality) the legislator who made this rule did not consider the situation in which the original owner lost his property not because of theft, but because of embezzlement. Then, in case of embezzlement, the rule must temporarily be left out of consideration, and all reasons for and against the conclusion that the receiving party has gained ownership must be balanced again. However, the rule's applicability is an additional reason that must be taken into account, because of legal certainty. It is the balance of all these reasons, including the rule's applicability, that determines whether the original owner retains his property or whether the receiving party gains ownership.

Raz does not agree without reservations with the last point that if the outcome of the weighing process is that another decision than that suggested by the rule should be taken, the rule does not apply.

In his discussion of the case that there are reasons which the authority (the rule maker) was meant to reflect correctly but failed to reflect, Raz writes that these reasons 'are none the less among the reasons which justify holding the directives binding'. Raz justifies this strange seeming view by pointing out that 'An authority is justified, according to the normal justification thesis, if it is more likely than its subjects to act correctly for the right reasons … If every time a directive is mistaken … it were open to challenge as mistaken, the advantage gained by accepting the authority as more reliable and successful guide to right reason would disap-

[17] Such reasons include both reasons pleading directly for or against the rule's conclusion, and reasons that regard the (relative) relevance of the reasons that went into the rule. These last reasons were not mentioned in Hage 1997.

[18] Sometimes this takes the form of reviewing a rule against legal principles. See in this connection Hage 1999a.

pear' (Raz 1986, p. 61). Having written this, Raz continues with a distinction between clear (easily recognisable) errors, and big errors (errors with big consequences), and suggests thereby that if the authorities made a clear error, this would be a reason for making an exception to the rule, while errors that are not clear (but possibly big) do not justify making an exception.

This is not the occasion to have a full discussion with Raz. Suffice it to say that Raz's theory about the relation between contributive reasons and rules provides jurisprudential underpinnings, both for the reason-based account of the logic of rules, and for the view that rules have some independent authority, next to the reasons that went into them.

## 7 The reason-based model of rule application and the open nature of the law

Having introduced the reason-based model of rule application, I am in a position to establish whether this model allows more ways to introduce new relevant facts than the subsumption model. I will do so by following the steps of the reason-based model and consider for each step whether it gives new opportunities to introduce relevant facts. According to the reason-based model of rule application, the following steps must be taken:

1) Determine whether the facts of the case at hand satisfy the conditions of the rule.
2) If the facts satisfy the rule conditions, there is a contributive reason to apply the rule. Then it must be determined whether there are reasons against application of the rule.
   a) If there is a decisive reason against application, there is an exception to the rule and the rule does not apply.
   b) If there are no reasons against application of the rule, the rule applies and its conclusion is attached to the case as legal consequence.
   c) If there are one or more contributive reasons against application, these reasons must be balanced against the reasons for application, including the applicability of the rule.
      i) If the contributive reasons for application outweigh the contributive reasons against application, the rule applies and its conclusion is attached to the case as legal consequence.
      ii) If the contributive reasons against application outweigh the contributive reasons for application, there is an exception to the rule, the rule does not apply and its conclusion is not attached to the case as legal consequence.
3) If the facts do not satisfy the rule conditions, there is a contributive reason not to apply the rule. Then it must be determined whether there are reasons to apply the rule analogously.
   a) If there are one or more contributive reasons for analogous application, these reasons must be balanced against the reasons against application, including the non-applicability of the rule.
      i) If the contributive reasons for analogous application outweigh the contributive reasons against application, the rule applies (analogously) and its conclusion is attached to the case as legal consequence.
      ii) If the contributive reasons against application outweigh the contributive reasons for analogous application, the rule does not apply and its conclusion is not attached to the case as legal consequence.
   b) If there are no reasons for analogous application of the rule, the rule does not apply and its conclusion is not attached to the case as legal consequence.

The first step is to determine whether the facts of the case at hand satisfy the conditions of the rule. Although this step requires interpretation of the rule (or classification of the case facts), and for this reason provides some leeway to introduce new relevant facts, it is not new in comparison to the subsumption model. Therefore the first step of the reason-based model does not make a difference with the subsumption model.

If on the first step, the rule was found to be applicable, the second step of the reason-based model is to determine whether there is a decisive reason against application of the rule. The reason-based model as such does not determine what would amount to a decisive reason against application of the rule and therefore provides ample room to introduce new relevant facts. However, decisive reasons are much less frequent than contributive ones, and it is not probable that a legal system will recognise many decisive reasons against the application of an applicable rule. A conflict with another applicable rule, as mentioned above, is the most plausible candidate. Whether such a conflict occurs depends solely on the interpretation of the other rule and/or the classification of the case facts, and here we do not find additional leeway in comparison to the subsumption model.

However, if there is a conflict, a decision needs to be taken which rule has precedence over the other. A legal system may have precedence 'rules' that deal with this issue (such as Lex Specialis), but these precedence 'rules' are better regarded as rule-like principles than as rules in the strict sense used here. For instance, even if one of two conflicting rules is more specific than the other, this is no more than a contributive reason why this rule has precedence. There may also be contributive reasons why the other rule has precedence (for instance that the other rule is more recent, or stems from a higher court), and legal systems usually have no limits on possible contributive reasons concerning which rule in a conflict set has precedence. So the issue of precedence in case of a rule conflict provides the opportunity to introduce new relevant facts.

If on the first step, the rule was found to be applicable, and the second step did not lead to a decisive reason against application of the rule, the third step of the reason-based model is to determine whether there are contributive reasons against application of the rule. The reason-based model does not specify what can count as a contributive reason against application of a rule and it is completely up to the legal system in question what kinds of contributive reasons against application of an applicable rule it recognises. Moreover, if there are such contributive reasons against application, it is also up to the legal system to determine how these reasons are to be weighed against the rule's applicability and possible other reasons pleading for application of the rule. In other words, there is plenty of leeway here to introduce new relevant facts.

If on the first step, the rule was found not to be applicable, the second step of the reason-based model is to determine whether there are contributive reasons to apply the rule analogously. Again, the reason-based model itself does not specify what can count as a contributive reason for analogous application of a rule and it is completely up to the legal system in question what kinds of contributive reasons for analogous application of a rule it recognises. Moreover, if there are such contributive reasons for analogous application, it is also up to the legal system to determine how these reasons are to be weighed against the rule's non-applicability and possible other reasons against application of the rule. In other words, here is plenty of leeway to introduce new relevant facts too.

To summarise, the reason-based model of rule application allows the introduction of new relevant facts into the law that are lacking in the subsumption model, when a decision needs to be made:

1. which of two conflicting rules has precedence over the other;
2. whether there are contributive reasons against the application of an applicable rule;
3. whether there are reasons to apply a non-applicable rule analogously;
4. in case there are both contributive reasons for and against application of a rule, whether the reasons for application outweigh the reasons against application, or the other way round.

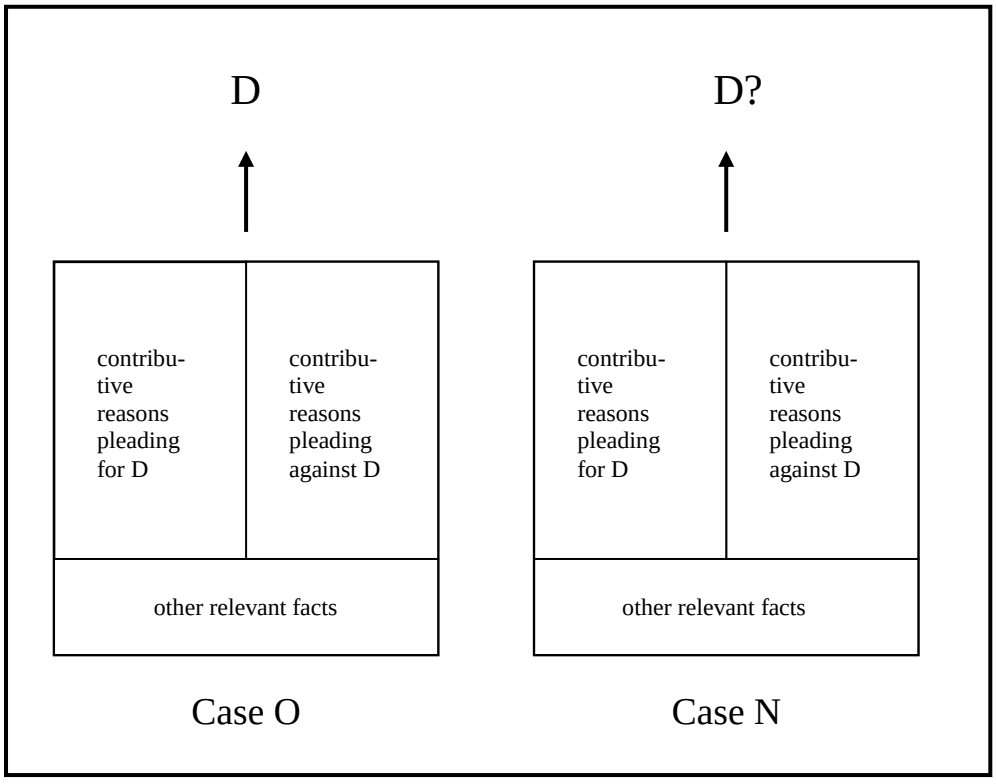
## 8 The reason-based model of case-based reasoning

To evaluate Legrand's claim that the case-based style of reasoning allows more possibilities to introduce new relevant facts into the law, we must compare the above reason-based model of rule application with a similar reason-based model of case-based reasoning. To that purpose I will outline a logical model of case-based reasoning based on the same conceptual framework of contributive reasons, decisive reasons and principles.

Cases can be used in legal reasoning in two main ways. One of them, prevalent in the civil law tradition, is to extract some kind of rule from the case and use this rule more or less like statute-based rules. The other one, prevalent in the common law tradition, is for reasoning by analogy. Reference to an old case is made to argue that the decision in a new case should be similar, because the old and the new case are similar. I will call this latter form of using cases *case-based reasoning*.

A crucial difference between the reason-based models of rule-based reasoning and case-based reasoning is that while rule-based reasoning turns around the fact that the application of a rule leads to a *decisive* reason for the rule conclusion, a similar phenomenon is lacking in case-based reasoning.

> The reason for this being, if we follow Raz's analysis, that rules have a particular element of authority that is lacking in cases. This does not mean that there is no element of authority involved in cases. In fact, the binding force of cases in systems where some form of stare decisis holds, illustrates the contrary. The crucial difference is that where rules are framed with the purpose of laying down authoritatively which facts count as relevant, cases are not.
>
> Nevertheless, stare decisis presupposes that if two cases are legally completely identical, the decision of the one case should also hold in the other one. It is only that cases by themselves, otherwise than rules, do not state what is relevant in them.




Because case-based reasoning is not based on decisive reasons the way rule-based reasoning is, the facts of a case do not include decisive reasons, but only contributive reasons for and against a possible conclusion. Let us assume that case-based reasoning involves two cases,

which are treated as analogous or not with regard to a particular conclusion. Let us call the cases O(ld) and N(ew), and assume that in case O a decision D was taken. The issue at stake is whether decision D should also be taken in case N and to what extent O provides authority for doing so.

Both cases contain, trivially, zero or more facts that are relevant for the decision D. Some of these facts (again zero or more) are contributive reasons that plead for D, and some are contributive reasons that plead against D. Other facts (zero or more) are indirectly relevant, for instance by influencing the (degree of) relevance of the facts that are contributive reasons.[19]

Stone (1968, p. 267f.) has argued extensively that there is lot of leeway for judicial choice in a system of precedent. Given the logical apparatus indicated above, it is possible to indicate three choices that must be made before case-based reasoning is actually possible.

The *first decision* that must be made, is which facts are in some way relevant for the conclusion that is at stake. This decision must be made for both cases. The motivation given for the judgement in the old case may be helpful in this connection, but it is not decisive. The determination which facts are relevant for the issue at stake is both crucial for the outcome of the case-based reasoning process, and at the same time hardly guided by the cases themselves. It presupposes some a priori understanding of what is legally relevant.[20]

> All facts that are relevant for some conclusion have their relevance because they belong to a type of fact that is normally relevant for this kind of conclusion. For instance, the fact that John damaged Jane's car is relevant for the conclusion that he ought to pay for the damages, because damaging is (under certain circumstances) a tort, and torts are relevant for liability. There is for all relevant facts one particular level of description that brings out their relevance for the issue at stake.

The *second decision* that must be made concerns the level of abstraction at which the relevant facts are to be described.

> Take for instance, the famous case of Donoghue vs Stevenson (1932, A.C. 562), dealing about the liability of the producer of a bottle of ginger beer that contained a decomposed snail. Is the relevant fact that the product was an opaque bottle of ginger beer, or that it was an opaque bottle of beverage, or any bottle of beverage, or any container of commodities for human consumption (Stone 1968, p. 269)?

*Third*, the logical role of the facts in the old case must be determined. Given the coarse categorisation of possible logical roles described above, three roles are possible, namely those of contributive reason for the decision, contributive reason against the decision, and otherwise relevant facts.

The precise logical role of a fact is important for the treatment of this fact in case-based reasoning. Suppose, for instance, that a fact was relevant in the old case because it pleaded for the decision taken in that case. If this fact is absent in the new case, this is probably a reason to distinguish between the cases, because the support for the decision is, at least in one respect, less strong in the new case than in the old case. If the same fact pleaded against the decision taken in the old case, the absence of this fact in the new is probably not a reason to distinguish the cases, because the support for the decision is even stronger in the new case, since a reason against that decision is lacking.

> Consider the following example: In case Old, the defendant hit the plaintiff on purpose, while in case New he hit the plaintiff by accident. Let us assume that the intention to hit is a reason for the liability of the defend-

[19] The ways in which other relevant facts can be relevant are quite diverse, and it is beyond the scope of this paper to elaborate on this issue. The interested reader is referred to Roth 2001a and 2001b.

[20] By stating that the determination of the relevant case facts requires an a priori understanding of what is legally relevant, we do *not* mean to say that relevancy is established a priori. It may very well be that the recognition of some facts as legally relevant is the outcome of persuasive reasoning in connection with the new case that is to be decided, and therefore originates after the new case. My point here is that the recognition of relevance is not justified by either the old or the new case.

ant. If in the Old case the defendant was held liable, the fact that the intention to hit was lacking in the New case is a reason to distinguish the cases. If, however, in the Old case the defendant was not held liable, the difference between the cases is not a reason to distinguish them, but rather a reason to argue a fortiori.

The same counts for a fact in the old case that increased the importance of some reason for the conclusion that was actually taken or decreased the importance of a reason against the actual decision. If such a fact is lacking in the new case, that is a reason to distinguish the cases. If, however, in the new case a fact is lacking that decreased the importance of a reason for the conclusion or increased the importance of a reason for the conclusion, this is not a reason to distinguish the cases.

Take for instance the case about the supermarket, discussed in section 3.1. In this case that fact that one person was suitable for her job decreased the relevance of her having not having the required papers. The conclusion in this case was that she should not be dismissed. As a consequence, if in a new case the person in question is not very suitable for his job, the cases are distinguishable. Had the conclusion in the old case been that the person in question should be dismissed despite her suitability, the cases are not distinguishable.[21]

To summarise, the reason-based model of case-based reasoning requires decisions concerning:

1. which facts are relevant,
2. under which categorisation they are relevant, and
3. their logical role.

On the basis of these decisions it is possible to determine on logical grounds whether the old case provides support for deciding the new case in the same way. Such support is present if both

- all reasons that were present in case O that plead for D are also present in case N, with at least the same importance;
- all reasons that are present in case N that plead against the decision were also present in case O, with at least the same importance.[22]

It should, however, be noted that the presence of this support is not sufficient to decide the new case. If case O is relevant for the decision in case N, this is a contributive reason to decide case N in the same way case O was decided. This contributive reason still has to be weighed against possible contributive reasons for a different decision than was taken in O.

## 9 Comparing case-based and rule-based reasoning

Let us return from our digression into the logic of case-based reasoning and focus again on the differences between case-based reasoning and rule-based reasoning and the relevance of these differences for the issue to what extent a legal system is open. In section 7 I distinguished four ways in which the reason-based model of rule application allows the introduction of new relevant facts, namely when decisions had to be taken:

1. which of two conflicting rules has precedence over the other;
2. whether there are contributive reasons against the application of an applicable rule;
3. whether there are reasons to apply a non-applicable rule analogously;
4. in case there are both contributive reasons for and against application of a rule, whether the reasons for application outweigh the reasons against application, or the other way round.

The question that we must answer now is how these possibilities relate to the corresponding possibilities in case-based reasoning. From the three decisions required by the case-based rea-

[21] More examples of this style of reasoning can be found in Roth 2001a and 2001b.
[22] These findings are argued extensively and elaborated in Hage 2001.

soning model, the first two, the decisions concerning which facts are relevant and under which categorisation they are relevant, allow the introduction of new relevant facts.

It is remarkable that the rule-based model is much more specific about when decisions concerning relevance have to be made. The reason for this is that the rule-based model of legal decision making is more structured than the case-based model. This difference in specificity makes a thorough comparison difficult, but the lesser specificity of the case-based model suggests that it allows more leeway for the recognition of new relevant facts, precisely as Legrand suggested. But let us take a closer look at the issue at stake and try to do so by paying special attention to the following question:

*Can there be facts that are intuitively relevant for the solution of a case, which the rule-based model nevertheless disallows to be taken into account?*

Answering such a question in abstract is not so easy, but let us try. Suppose that we have a case C and that the issue at stake is whether decision D should be taken. Then there are four possibilities, that I will discuss in turn:

a. There is an applicable rule R with conclusion D.
b. There is an applicable rule R with a conclusion that is incompatible with D.
c. There are two applicable rules, one with conclusion D and one with a conclusion that is incompatible with D.
d. There is no applicable rule that deals with the issue D.

Ad a.
If there is an applicable rule R with conclusion D, the normal outcome of the case should be D. Additional relevant facts F are only really relevant if they plead against this conclusion. Is it possible to conclude that not-D on the basis of these additionally relevant facts? The answer is a plain *yes*. The 'only' thing that is necessary is to make an exception to the rule R, because F outweighs the applicability of R. Logically, there is no problem to take F into account on the rule-based model. Whether F is considered to be sufficiently important to make an exception to R is an issue that cannot be dealt with by means of logic alone. That is a matter of the legal system in question, but the above shows that, otherwise than Legrand suggests, it is not a matter that is decided purely by the fact that the system belongs to the civil law tradition.

Ad b.
This situation is exactly the mirror of the previous. Now F is only really relevant if it pleads for D. Again the central question is whether F is sufficiently important to make an exception to R, and again this question cannot be answered purely on the basis of the civil law tradition of the legal system.

Ad c.
If there are two conflicting rules that are both applicable to a case, the issue at stake is to which rule an exception must be made because of the applicability of the other rule. In other words, it must be decided which of the two rules has precedence over the other.

Sometimes there is an applicable rule that deals with this question. For instance, article 7a:1623b, section 5 of the Dutch Civil Code states explicitly that the terms for giving notice for a contract of rent of housing replace the terms for rent contracts in general. If new relevant facts should play a role in such a case, it must be by making an exception to such a priority rule.

More often a conflict of rules is governed by principles that deal with their preference. The Lex Specialis 'rule' is such a principle that gives a contributive reason why the more specific rule has precedence. New relevant facts can in this case play a role when they are either con-

tributive reasons that plead in the different direction than such a principle (for precedence of the other rule), or reasons to balance the reasons concerning precedence in some way.

If there is neither a rule nor a principle dealing with the precedence of the conflicting rules, new relevant facts can play a role through being reasons for giving either one of the conflicting rules precedence. (This situation is not essentially different from the previous one.)

Ad d.
If under a rule-based system a case arises for which there is no rule, the case must be decided by reasons that are not based on a rule. *Logically* there is no objection against declaring any fact legally relevant, so this situation does not pose any objections against assigning facts legal relevance.

Summarising, we find that in neither one of the four distinguishable cases, there are logical objections against assigning legal relevance to a fact or set of facts. So the answer to the question whether there can be facts that are intuitively relevant for the solution of a case, but which the rule-based model disallows to be taken into account, is negative. The rule-based model *as such* does not pose any limitations to the recognition of legal relevance.

## 10 The case of the murderous spouse revisited

The above discussion about the possibilities of rule-based reasoning and case-based reasoning has been rather abstract. Let us reconsider the case of the murderous spouse to see what the outcome of that discussion means in legal practice. To that purpose we will first look how that case might be handled under a system of case-based reasoning and then consider how the Dutch courts, who operated under a system of rule-based reasoning, actually dealt with it. Remember that the case ran as follows:

> A rich old lady was nursed by a poor young man. After some time the two married, without making any special arrangements about their properties. According to the Dutch law, this meant that their properties were joined together and became their common property. Not long after their marriage the young man murdered his wife. The legal issue at stake was whether he could receive half of the marital estate because the marriage had ended.

The treatment of the case as if it were handled under a system of case-based reasoning is only possible if an initial difficulty is overcome, namely that the Dutch system works primarily with rules and case law is mainly used for the interpretation of statutory rules. The most relevant antecedent legal material is a statutory rule stating that he who was convicted for killing, or for trying to kill, the deceased, is not worthy to inherit from the deceased.[23] Implicitly this rule means that such a person does not inherit. To use this rule for case-based reasoning, we will treat it as if it were a case and assume that in this case it was decided that the murderer of the deceased, who would normally inherit, in fact did not receive the estate.

To use this case as a possible precedent, it is necessary to establish which facts of the case are relevant, under which categorisation they are relevant, and what their logical role is. The origin of our hypothetical case in a statutory rule makes it easier than normal to determine which facts in the old case are relevant, because our hypothetical case does not contain any irrelevant facts. But this origin does not provide any help in determining which facts of the new case are relevant. Does it matter that the potential inheritor nursed the deceased, or that he married her only recently? Obviously it is relevant that the murderer actually married the deceased, because otherwise the issue could not arise whether he was entitled to half of their estate because their marriage ended, but is it also relevant that he was married to the deceased as an independent reason why he should receive half of the estate?

[23] Article 4:885 sub 1 of the Dutch Civil Code.

The second issue, concerning the categorisation under which the relevant facts are relevant, is completely open. Does the murderer in the old case not inherit because he murdered the deceased, or because he inflicted some wrong on the deceased, or because he inflicted some serious wrong on the deceased, or because he inflicted a wrong that merely causally contributed to the deceased's dying, without necessarily amounting to murdering the deceased? Is the fact that the murderer was married to the deceased relevant because being married is a close relationship, or because it is a legally recognised relationship?

The third issue is relatively easy to decide for the old case. The fact that the potential inheritor murdered the deceased is a reason why he should not inherit. Presumably this is also a reason why he should not receive half of the marital estate. But what is the role of the fact that the murderer was married to the deceased? Is not this also a reason why he should receive half of the estate. And is the fact that they were married only recently a reason to make this last reason relatively less important, or is it (also) a reason why the fact that the potential inheritor murdered his wife is a stronger reason why he should not receive half of the marital estate?

The desirable conclusion that the murderous spouse does not receive half of the marital estate can be reached by assuming that in the old case the reason why the murderer did not inherit were that

- receiving a heritage is drawing a benefit from the deceased's passing away;
- he murdered the deceased;
- the fact that he murdered the deceased was a reason against his inheriting that outweighed the reason(s) why he should inherit.

There should also be assumptions about the new case, namely that:

- receiving half of the marital estate is drawing a benefit from the deceased's passing away;
- the fact that the murderer was married to the deceased as a reason for letting him receive half of the estate does not outweigh the fact that he murdered the deceased as a reason why he should not receive half of the estate.

Given these assumptions about the cases, the two cases are completely analogous, and this is a reason why the conclusion of the first case, that the murderer should not draw a benefit from his murdering the deceased (at this level of abstraction), should also hold for the new case.

Apparently the case-based style of reasoning provides sufficient leeway to reach a desirable conclusion. What about the rule-based style of reasoning?

The Court of Justice that decided the case had the problem that the Dutch law does not contain any other rule about the subject than the general rule stating that when a marriage ends, the marital estate is divided equally between the former spouses, which implies that if the marriage ends by the death of one of them, the division takes place between the surviving spouse and the inheritors of the deceased one. No word in this regulation about the possibility that the one spouse murdered the other one. So if the Court were to apply the applicable rule, the result would be that the murderous spouse received half of the marital estate.

That is not what happened in fact, however. The Court found that there is a legal principle underlying the rule of article 4:885 sub 1 of the Dutch Civil Code, the rule that a murderer is not worthy to inherit from the person he murdered.[24] This principle runs, according to the Court, that a murderer should not profit from his murder. By applying this principle to the case of the murderous spouse, the Court found that the rule about the division of the marital estate should not be applied in case the one spouse murdered the other one. In other words, the actual outcome of the case of the murderous spouse under a system of rule-based reasoning is exactly the same as the outcome would presumably be under a system of case-based

[24] HR December 7 1990; NJ 1991, 593.

reasoning, and – although with a different logical construction – for essentially the same reason as under case-based reasoning.

In the case of the murderous spouse, the alleged rigidity of a system of rule-based reasoning turned out not to be as limiting as Legrand would like us to believe. Of course, this is only one example, but this example illustrates a point that was made theoretically above, namely that any fact that can be recognised as legally relevant under a system of case-based reasoning can also be recognised as relevant under a system of rule-based reasoning. Case-based reasoning and rule-based reasoning make use of different logical constructions, but this difference in form needs not lead to a difference in content. Everything that is possible under a system of case-based reasoning is also possible under a system of rule-based reasoning, although not always in precisely the same way.

## 11 The possible and the actual

We have found that the differences between case-based reasoning and rule-based reasoning are merely differences in form and that these differences need not lead to any differences in the outcomes of actual cases. Everything that is possible under a system of case-based reasoning is also possible under a system of rule-based reasoning. To the extent that Legrand's argument is based on the different possibilities offered by case-based reasoning and by rule-based reasoning, his argument is mistaken.

However, Legrand might try to rescue his position by pointing out that there is a difference between what is legally possible and what actually happens. Maybe systems based on case-based reasoning contingently allow the introduction of new relevant facts more easily than systems based on case-based reasoning. The attribution of this difference, if it exists, to the nature of case-based reasoning and rule-based reasoning would be less happy then, but that does not take the difference away.

Suppose that Legrand is right in the sense that there are differences in legal mentality concerning the issue how easy prima facie irrelevant facts are recognised as legally relevant nevertheless. It might even be the case that systems based on precedent just happen to be more open in this sense than rule-based systems. Whether this is so should be established by empirical research, however, and cannot be argued on a priori grounds purely by considering the inherent nature of cased-based reasoning and rule-based reasoning. That is the outcome of our logical investigations of the previous sections.

Suppose, however, that empirically Legrand turns out to be right and that there is a difference in how open legal systems are (which is well possible) and that this difference coincides with whether a legal system is precedent-based or rule-based (which is not obvious). Does it follow from this finding that the enterprise of obtaining legal integration by means of a European civil code is doomed to fail?

That does *not* follow, because, if our argument in this paper is correct, the differences are not intrinsically tied to the different logical bases of the legal systems in question, but are merely coincidental, presumably the outcome of historical developments which were different for different legal systems.[25] But differences that have grown historically can also disappear historically, and the introduction of a European civil code might be a factor that contributes to the disappearance of these differences. Whether this is the case and whether this is desirable cannot be established on logical grounds and falls outside the scope of this paper.

## 12 Conclusion

I started this paper with the truism that asking the right question is giving half of the answer. Legrand argued against the introduction of a European Civil Code on the ground that the

[25] A brief description of these different developments can be found in Smits 2002, chapter 3.

presence of one and the same code cannot lead to the same law if this code is to operate within two fundamentally different legal cultures, namely the cultures of civil law and of common law. Common law systems would, in my terminology, be more open than civil law systems. I hope to have shown how the issue raised by Legrand can be formulated quite sharply by means of logical models of rule application and case-based reasoning. Moreover, I have argued by means of an alternative model of rule application that, although there are logical differences between precedent-based systems and rule-based systems, these differences need not lead to differences in the recognition of new relevant facts. In other words, the differences between common law systems and civil law systems need not lead to differences concerning how open the systems in question are. Therefore, the reasons adduced by Legrand that are based on the difference between the mentality of common law systems and the mentality of civil law systems fail to achieve their purpose.

It is not impossible, however, that legal systems differ concerning the issue how open they are. Because these differences are not necessarily tied to differences in the logical bases of these systems, there are no logical reasons why such differences, where they exist, could not be overcome. The introduction of a European Civil Code might be among the causes why the differences in openness of legal systems can disappear.

## Appendix: The logic of reasons

The logic of reasons can be summarised as follows:

Decisive reasons

1. If A is a fact (or a combination of facts), and if A is a decisive reason *for* B, then the fact B obtains.
2. If A is a fact (or a combination of facts), and if A is a decisive reason *against* B, then the fact not-B obtains.

Contributive reasons
Suppose that $P_1 \ldots P_m$ are facts (or combinations of facts) that are contributive reasons for D, and
that $C_1 \ldots C_n$ are facts (or combinations of facts) that are contributive reasons against D.

Then D is the case if either:
- there is a decisive reason for D, or
- $P_1 \ldots P_m$ together outweigh $C_1 \ldots C_n$.

Then not-D is the case if either:
- there is a decisive reason against D, or
- $C_1 \ldots C_n$ together outweigh $P_1 \ldots P_m$.

If P is a fact that is a contributive reason for D then D is the case if there is no reason, decisive or contributive, against D.

If P is a fact that is a contributive reason against D then not-D is the case if there is no reason, decisive or contributive, for D.

## References


Alchourrón, C.E. and Bulygin, E. (1981). The Expressive Conception of Norms. R. Hilpinen (ed.), *New Studies in Deontic Logic*, D. Reidel Publishing Company, Dordrecht e.a., pp. 95-124.

Alexy, R. (1978). *Theorie der juristischen Argumentation.* Suhrkamp Verlag, Frankfurt am Main.

Alexy, R. (1996). *Theorie der Grundrechten*, 3rd ed., Suhrkamp, Frankfurt a/M.

Alexy, R. (1999). The Special Case Thesis. *Ratio Juris* **12**, nr. 4, p. 374-384.

Alexy, R. (2000). On the Structure of Legal Principles, *Ratio Juris* **13**, nr. 3, p. 294-304.

Dworkin, R. (1978). *Taking Rights Seriously*, 2nd ed., Duckworth, London.

Fuller, L.L. (1958). Positivism and Fidelity to Law: A Reply to Professor Hart, *Harvard Law Review* 71, pp. 630-672.

Fuller, L.L. (1969). *The Morality of Law*, 2nd ed., Yale University Press, New Haven and London.

Verheij, H.B. and J.C. Hage (1994). Reasoning by analogy; a formal reconstruction. H. Prakken, A.J. Muntjewerff and A. Soeteman (eds.), *Legal knowledge based systems; the relation with legal theory*, Koninklijke Vermande, Lelystad, pp. 65-78.

Hage, J.C. (1997). *Reasoning with rules*, Kluwer Academic Publishers, Dordrecht.

Hage, J.C. (1999a). Twee lagen van het recht, in P.W. Brouwer e.a. (red.), *Drie dimensies van recht*, Bju, Den Haag, p. 197-217.

Hage, J.C. (1999b). Moderately Naturalistic Deontic Logic. P. McNamara and H. Prakken (eds.), *Norms, Logics, and Information Systems*, IOS Press, Amsterdam e.a., pp. 56-72.

Hage, J.C. and A. Peczenik (2000). Law, Morals, and Defeasibility. *Ratio Juris* 13, no. 3, p. 305-325.

Hage, J.C. (2001). Formalizing legal coherence. *Proceedings of the 8th International Conference on Artificial Intelligence and Law*, ACM, New York, p. 22-31.

Kelsen, H. (1960). *Reine Rechtslehre*, 2nd ed., Franz Deuticke, Wien.

Legrand, P. (1997). Against a European Civil Code. *Modern Law Review* 60:1.

MacCormick, D.N. (1978). *Legal Reasoning and Legal Theory*, Clarendon Press, Oxford.

Nieuwenhuis, J.H. (1976). Legitimatie en heuristiek van het rechterlijk oordeel. *Rechtsgeleerd Magazijn Themis*, blz. 494-515.

Radbruch, G. (1973). *Rechtsphilosophie*, 4th ed., edited by E. Wolf und H-P Schneider, Koehler Verlag, Stuttgart.

Raz, J. (1975). *Practical Reason and Norms*, Hutchinson, London.

Raz, J. (1986). *The Morality of Freedom*. Clarendon Press, Oxford.

Roth (2001a), A Typology of Moves Involved in Case Comparison, *Proceedings of the 8th International Conference on Artificial Intelligence and Law*, p. 129-138.

Roth (2001b), The Dialectics of Case Comparison: a Formal Reconstruction, in Bart Verheij e.a. (eds.), Proceedings of Jurix 2001, IOS Press, Amsterdam, p. 29-40.

Smits, Jan (2002) *The Making of European Private Law*, Intersentia, Antwerpen.

Stone, J. (1968). *Legal System and Lawyer's Reasonings*. Stanford University Press.

Verheij, Bart (1996). *Rules, Reasons, Arguments. Formal studies of argumentation and defeat*. Thesis Maastricht University.

Wróblewski, J. (1992). *The Judicial Application of Law*, edited by Z. Bankowski and N. MacCormick, Kluwer Academic Publishers, Dordrecht.

Zippelius, R. (1974) *Einführung in die juristische Methodenlehre*, 2nd ed, C.H. Beck, München.