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Syllogism and Defeasibilty: A Comment on Neil MacCormick's Rhetoric and the Rule of Law

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ABSTRACT:
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Contents

Syllogism and Defeasibilty: A Comment on Neil MacCormick's *Rhetoric and the Rule of Law*[*]

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Abstract

This paper provides a review of *Rhetoric and the Rule of Law*, by Neil MacCormick, focussing on the role of logic in legal reasoning. In particular it considers the connection between syllogism, formal methods and rhetoric, and it distinguishes various aspects of legal defeasibility.

Contents

1 Introduction

In the book entitled *Rhetoric and the Rule of Law*, Neil MacCormick provides an account of legal reasoning which admirably reconciles different aspects of legal reasoning, aspects that are often presented as expressing incompatible ideological or theoretical approaches. This is the case for the main opposition addressed in the book, namely, that between the rule of law and the arguable character of law, and for a second opposition, too, which completes and explains the first one, namely, that between logic and rhetoric.

The book addresses many important issues in legal theory and doctrine (from legal values to the idea or reasonableness, to the notion of *ratio decidendi*), combining the discussion of foundational themes with precise analyses of judicial cases. I will only address one such issue, namely, the role of logic in legal reasoning, and in particular the connection between logic and defeasibility.

2 Syllogism and Rhetoric

The main thesis of the book is that a reconciliation is possible between the rule of law and the arguability of legal decisions. Achieving such a reconciliation is the task of rhetoric, which

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is seen as a theory of rational non-deductive argumentation, namely, a theory of how we can draw non-deductive, yet rationally supported conclusions (rhetoric deals with rational persuasion, rather than with effective persuasion). After expounding this idea of rhetoric in the first chapter of the book (referring to various approaches, such as Viehweg's topic, Perelman's new rhetoric, Toulmin's idea of an argument, Alexy's procedural legal argumentation, and Scanlon's model of moral justification), MacCormick provides an account of the role of deduction (syllogism) in legal reasoning that develops and expands the views he expressed almost 30 years ago in *Legal Reasoning and Legal Theory* (MacCormick 1978), a book which has constituted one of the major references for the debate in legal theory.

In MacCormick's account the role of deduction in legal reasoning is linked to the idea of a rule. A legal rule is described as a conditional statement, linking a normative consequent to a set of operative facts: any instance of the rule's operative facts determines a corresponding instance of rule's normative consequent (pages 42-3), that is, whenever the operative facts take place, the consequent effect is produced. This view of legal rules leads us to the idea of the normative syllogism: given a rule, and given an instance of its operative facts (the belief or assertion that such an instance has taken place), one can derive the rule's normative consequent. The idea of the legal syllogism is linked to the value of the rule of law: only if we can cast legal reasoning in the form of a combination of rule-based syllogisms is the rule of law satisfied: "at the heart of the liberal idea of free government and at the heart of the distinction between free and despotic government is the idea that when governments act towards citizens their action must be warrantable under a rule."

3 Perelman's Challenge to the Legal Syllogism

Having so characterised the importance of rule-based reasoning in the law, MacCormick has to face the usual challenge to syllogistic approaches to the law, namely, the idea that syllogistic inference, though possible, and indeed incontrovertible, has little importance for legal reasoning. This was the fundamental claim of Chaim Perelman, who did not question the permissibility of applying logic to legal contents, but rather questioned the significance of the resulting inferences:

> There is nothing wrong, ultimately, in presenting judicial reasoning in the form of a syllogism, but this form gives no guarantee of the value of the conclusion. If the conclusion is socially unacceptable, it means that the premises have been accepted lightly. Now, let us not forget that the whole of judicial debate and the whole of legal logic concern only the choice of the premises which would be better justified and which would raise the fewest objections. It is the role of formal logic to make the conclusion cohere with the premises, but it is the role of legal logic to show the acceptability of the premises. This results from comparing the pieces of evidence, arguments, and values which are opposed in the litigation; the judge must arbitrate in order to take a decision and to justify his or her judgement. (Perelman 1979, 176; my translation)

MacCormick indeed recognises that the legal syllogism does not solve the problems that are involved in the applications of the law: according to him, it is up to rhetoric, rather than to logic, to provide input to syllogism, namely, to provide and justify the facts and the rules to which syllogism is to be applied.

Thus, the distinction between logic and rhetoric seems to match, in MacCormick's view, the traditional distinction between *internal* and *external* justification of legal conclusions (decisions) where the internal justification consists in deriving a legal conclusion from general legal rules and corresponding particular factual propositions (according to the syllogistic model), and external

justification consists in supporting through non-logical (rhetorical) arguments the endorsement of these rules and factual propositions. As I have observed in Sartor (2005, chap. 14), this idea tends to downplay the role of logic in legal reasoning. We should not underestimate the complexities which may be involved in legal syllogism (in certain areas of the law, like tax law, we may need to chain multiple syllogisms in order to come to specific conclusion), but undoubtedly all interesting and controversial issues in legal reasoning seem to pertain to external justification. Thus, the assumption that internal and external justification find respectively in logic and rhetoric their exclusive intellectual tools would leads us to conclude all interesting issues lie outside the domain of logic, and belong to the empire of rhetoric (as Perelman would say).

Against the assimilation of the dichotomy between internal and external justification to the dichotomy between logical and rhetorical reasoning, it must be observed that on the one hand logic has a broader application than just internal argumentation and on the other hand that logic and rhetoric fail to cover all aspects of legal justification if logic is understood in a narrow way, namely, as including deductive reasoning only.

In fact logic, when appropriate, also applies to the justification of concrete factual propositions, and also to the justification of norms (most trivially, when we argue that a certain rule is valid having been issued in a certain way by an authority that has the power to issue norms in that way, or when we argue that a certain reconstruction of the facts of a case is logically consistent). Logical reasoning cannot substitute for trained intuition, nor can it cover the whole field of plausible argumentation, but it can indeed find application both in arguments concerning the justification of norms and in arguments concerning the proof of facts.

With regard to the exhaustiveness of the combination of logic and rhetoric, we have to ask ourselves how we understand the notion of logic, namely, where we draw the borders of such a discipline: does logic only cover deductive reasoning, or does it also cover formal models of other kinds of reasoning (inductive reasoning, defeasible reasoning, probability calculus, decision theory, game theory, and so on)? It would seem quite strange to put all these formal approaches to reasoning and problem-solving into the domain of rhetoric (unless the latter is understood in a very broad way), and it would be arbitrary to argue that the lawyer should not make use of such formal tools when approaching legal issues. In many contexts, such methods will be useless or irrelevant (as when we lack the data which is required for their application), but in some other contexts they are indeed both applicable and useful. Only by using the notion of logic in a very broad sense (as covering all formal methods for rational justification), can we view it as covering all the areas of legal reasoning which rhetoric fails to capture. However, if we understand the notion of logic in broad sense (so that it covers, for instance, the defeasible logics used in artificial intelligence and law, the statistical methods used in DNA analyses, or the application of game theory or probability theory in law and economics) we need to recognise for logic an application in the legal domain much wider than legal syllogism.

4 Logic as a Structuring Tool

Though MacCormick's focus on syllogism may express too limited a view of the role of logic (or formal methods) in legal reasoning, his account of the judicial syllogism has the merit of emphasising one important function of the role of logic in the law: syllogism gives structure to legal reasoning, and in particular, it determines the object of rhetorical thinking. More exactly "if the legal syllogism is taken as exhibiting the framework of all legal reasoning that involves applying the law, there is a limited number of ways in which problems can arise that require

in-principle non-deductive, that is, rhetorical or persuasive, reasoning to resolve them" (page 42).

MacCormick lists four possible problems requiring a rhetorical solution: the problem of proof (establishing whether the alleged facts have taken place), the problem of classification or qualification (establishing whether the alleged facts are an instance of the operative facts in a rule), the problem of interpretation (of establishing the correct reading of an acknowledged textual rule), the problem of relevancy (of establishing whether there is a rule which deals with the alleged facts).

Thus MacCorkick's reply to Perelman's statement that logic, though legitimate, is unimportant seems to be the idea the syllogism plays an important role in legal reasoning even if it does not provide a solution to controversial legal issues: this role consists in providing a structure to legal discourse, and so in determining the agenda for legal inquiries. This is a very important insight in the nature of legal reasoning. I would, however, complement this idea with the indication that logic, intended in a sufficiently broad sense, has a content and a domain of application which is much broader than syllogistic internal justification. One way to develop MacCormick's ideas, which I think is consistent with the general framework he provides, is that of viewing rhetoric not as an alternative to logic, but rather as providing a set of reasoning schemata (and of stategies for their uses), schemata which may contain logical and formal patterns as one of their ingredients (see, for instance Walton 2005).

5 Logic and Particularism

There is a second objection of Perelman to legal syllogism that we need to consider, namely, the idea that a logical model of legal reasoning is linked to a certain value-hierarchy, privileging certainty over equity, or more generally to a certain psychological and methodological preference, favouring an anticipatory approach to problem solving over a responsive one. This is how Perelman opposes a logical to a practical approach to problem-solving:

> The first [approach], which may be called logical, is that in which the primary concern is to resolve beforehand all the difficulties and problems which can arise in the most varied situations, which one tries to imagine by applying the rules, laws and norms one is accepting. This is usually the approach of the scientist, who tries to formulate laws which appear to him to govern the area of his study and which, he hopes, will account for all the phenomena which can occur in it. It is also the usual approach of someone who is developing a legal or ethical doctrine and who proposes to resolve, if not all the cases where it applies, at least the greatest possible number of those with which one might be concerned in practice. The person who in the course of his life imitates the theorists we have just referred to is regarded as a logical man, in the sense in which the French are logical and the English are practical. The logical approach assumes that one can clarify sufficiently the ideas one uses, make sufficiently clear the rules one invokes, so that practical problems can be resolved without difficulty by the simple process of deduction. This implies moreover that the unforeseen has been eliminated, that the future has been mastered, that all problems have become technically soluble. [...]
>
> Opposed to this approach is that of the *practical man*, who resolves problems only as they arise, who rethinks his concepts and rules in terms of real situations and of the decisions required for action. Contrary to the approach of the theorist, this is the approach of practical men, who do not want to commit themselves more than is necessary, who want to keep as long as possible all the freedom of action that circumstances will permit, who wish to be able to adjust to the unexpected and to future experience. This is the normal attitude of a judge who, knowing that each of his decisions constitutes a precedent, seeks to limit their scope as much as he can, to pronounce his verdicts without giving any more reasons than are necessary as a basis for his decision, without extending his interpretative formulas to situations whose complexity may escape him. (Perelman and Olbrechts-Tyteca 1969, 197-8)

This issue is addressed by MacCormick in chap. 5, entitled "Universals and Particulars". I cannot here repeat the detailed and careful arguments which exemplify and discuss on the one hand the importance of a particularistic attitude (the capacity to take into account all relevant features of individual cases), and on the other hand the need for a universalistic justification (which applies to all cases having the same relevant features).

There are, however, two aspect of "rule-based" decision-making on which we need to focus, to provide a full reply to Perelman. The first aspect, on which MacCormick is not, I believe, sufficiently detailed, concerns the justification for developing and applying rules. The second, on which instead he does provide a convincing answer, by appealing to the idea of defeasibility, concerns the need to make the endorsement and the application of rules consistent with the fact that the "the unforseen" has not "been eliminated" from the law. I shall address the first aspect the next section, and the second in the subsequent one.

6 Theory Construction

The use of rules is certainly linked to justification, but the requirement of justification only is a part of the story: in fact legal decisions can also be justified without appealing to rules (for instance, teleologically referring to the values that would be advanced by a certain decision, or analogically referring to previous decisions of similar cases), and the construction-application of rules does not only occur for the purpose of justification. Rule-based thinking in the legal domain can also be supported on additional grounds.

First of all, the application of rules can contribute to the efficiency and impartiality of decision-making and to the creation of congruent expectations on their potential addressees (see Jori 1980 and Schauer 1991; for a balanced discussion of the comparative merits of rules and analogies, see Sunstein 1996, esp. 244ff.).

Moreover, rule-based thinking also involves a cognitive aspect: constructing rules, applying them in concrete cases, and testing them may contribute to practical knowledge, and even improve the decision of individual cases. This is not to deny the importance of intuitive assessments and casuistic decisions, but rather to stress the need that a balance (a reflective equilibrium) is realised between rules and particulars. Let me characterise this aspect of rule-based thinking by quoting Robert Nozick (who uses the word *principle* in a way that also covers rules, as they are usually understood in legal theory):

> Principles can guide us to a correct decision or judgment in a particular case, helping us to test our judgment and to control for personal factors that might lead us astray. The wrongness that principles are to protect us against, on this view, is individualistic - the wrong judgment in this case - or aggregative - the wrong judgments in these cases which are wrong one by one. (Nozick 1991)

Interestingly, Nozick (who attributes to the practice of principles, besides a teleological utility, also an evidentiary and a symbolic utility) establishes a connection between the use of rules in law and in morality on the one hand, and scientific laws on the other hand, a connection which was also observed by Alchourrón (1996, 334), who has emphasised the parallel between the deductive view of the law (where the content of a legal decision should be a conclusive consequence of a set of pre-existing factual and normative premises, where the normative premises set should be general) and the nomological model of the natural sciences (where, according to Hempel 1966, the facts to be explained, the *explanandum*, should be logical consequences of a set of premises, the *explanans*, containing contain general laws, along with specific prior facts).

Though MacCormick extensively addresses the importance of justification according to general rules (and the requirement of predictability which is intrinsic to the rule of law) his emphasis on particularism makes him possibly disregard the cognitive and structuring function of rules in legal reasoning, namely, the insights obtained by articulating legal knowledge in general rules (though this can be, and often is, done in connection with the decision of particular cases). Focusing on this aspect would emphasise an aspect of rule-based reasoning, namely, its contribution to the rational decision of a particular individual case, an aspect which coexists with its other functions, namely, that of providing a backward-looking justification and a forward-looking contribution to the coherence of future problem-solving.

I take the liberty of shortly mentioning my own attempt to provide a model of legal reasoning involving on the one hand the construction of theories (of abstract views of the law, including factors, rules, and values, as well as dependencies and priorities between them) out of concrete decisions and on the other hand the application of such theories in making such decisions (Bench-Capon and Sartor 2003, Bench-Capon and Sartor 2000, chap. 29, Hage and Sartor 2003). From this perspective, theory-construction and theory-usage are connected through the process of mutual adjustment and influence between particular-concrete decisions and abstract determinations.

As Figure 1 shows, legal reasoning, when seen in this perspective, takes the shape of a circle, including two main movements, an ascending movement, toward abstraction, and a descending movement, toward concretisation.

The ascending movement starts with concrete cases, which may be real ones (so that the facts of the case are coupled with a corresponding judicial outcome) or hypothetical ones (so that the facts of the case are coupled with the outcome suggested by our "sense of the law" or our "sense of the right," namely, what the Germans call *Rechtsgefühl*).

Given a particular case, accompanied by a corresponding outcome, we try to extract (abstract) the relevant aspects of the case, which favour a certain issue, relevant to the case, being decided in a certain way or other.

When a case contains factors pushing the decision of an issue towards opposite directions (for instance, in intellectual property, the originality of a work pushes toward the conclusion that the the work is covered by copyright, while a work's significance for didactical purposes pushes toward allowing its free use), the outcome of the case shows (*a*) that the factors in the case favouring its decision are sufficient to determine that decision, and (*b*) that these factors prevail over the contrary factors which were present in the case.

We then come to view our case as governed by a rule. The case-rule collects a combination of all or some of the factors supporting the outcome associated to the case, and establishes, for any instance of such a combination, an instance of that outcome. Moreover, by assuming that the case-decision is explained according to such a rule, we imply that this rule outweighs the opposite rule collecting all factors favouring a different decision of our case.

The fact that a certain factor favours a certain outcome can be explained with reference to values which would be advanced by recognising that factor (for instance, by recognising that original works should be protected, we advance the values or art and creativity, while by recognising that works should be available for teaching purposes, we contribute to education and culture), and thus can be taken as evidence that such values are legally relevant.

The fact that a rule prevails over another rule shows that the values advanced by that rule outweigh the values that are advanced by the competing rule.

The ascending process is a process of construction, which may supported by reasons of various kind, according to different reasoning schemata (different *theory constructors*, as I have called them). This construction process may go through all steps we have indicated, but may

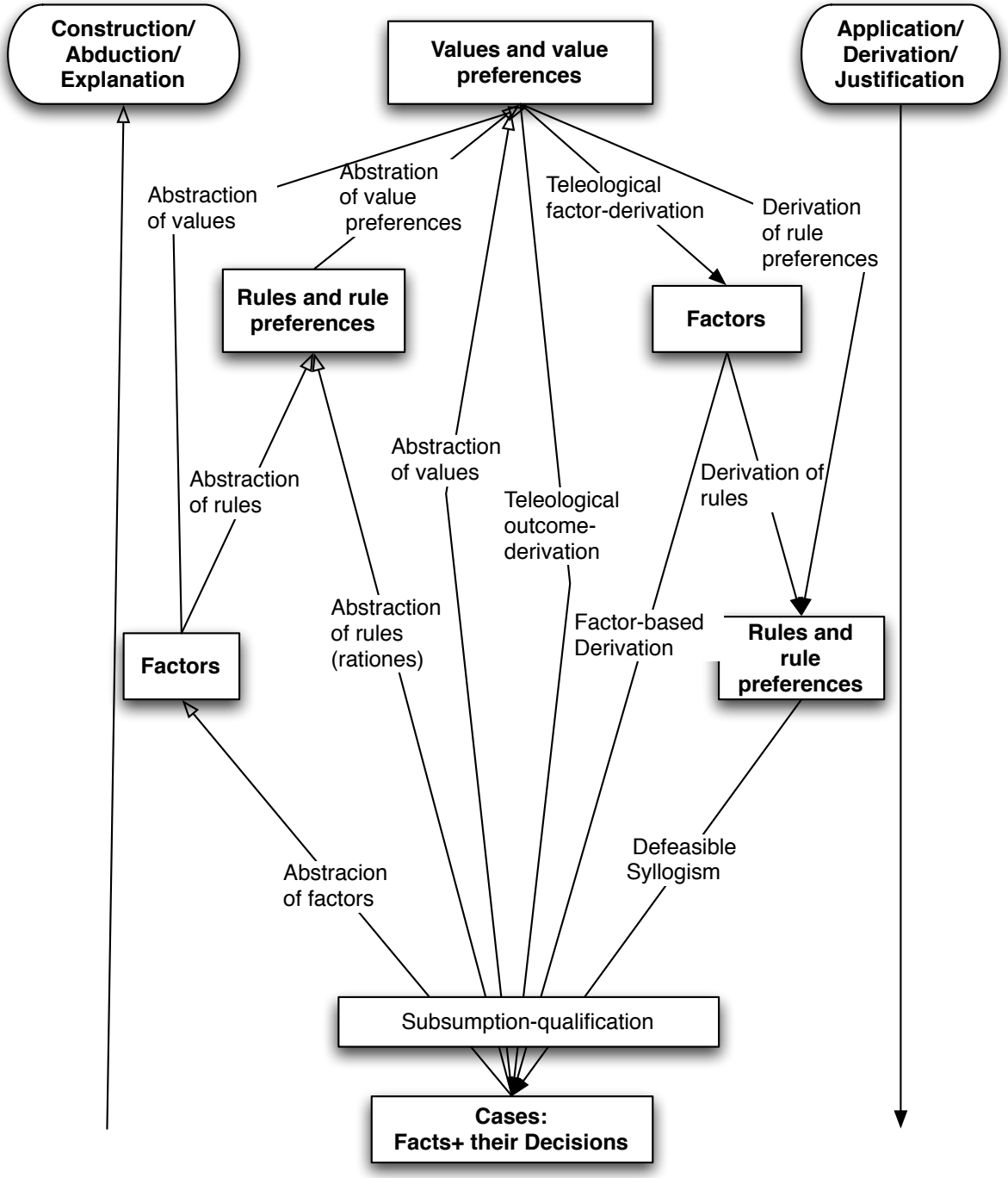

Figure 1: The circle of legal reasoning

also be shortcut, so that one directly jumps from a decision to the rules it embeds, or to the values it advances.

The output of this ascending process is not uniquely determined: each step can be performed in different ways; for instance, a precedent can be explained according to different rules (rationales) which can be viewed as instantiating different values. However, the requirement of coherence allows us to identify certain abstract constructions moves are better than certain others, since they lead to more-coherent theories (which explain a larger number of cases, take into account a larger number of relevant factors, provide simpler explanations, posses a higher degree of connectedness, etc.).

Let us now consider the descending movement, where given certain values, we identify the factors whose recognition could advance these values, we then combine these factors into rules, and, on the basis of the ranking of the corresponding values, give priorities to the rules. We can then argue in favour of a specific decisions in different ways: either by performing a teleological derivation (namely, by arguing that a certain particular decision would advance a certain value) or by referring to factors (namely, by arguing that the case at issue presents a sufficient number of factors supporting a certain outcome, which outweigh the factors to the contrary), and finally by the syllogistic application of a rule (an application which, I would claim, is defeasible rather than deductive, as I shall show in the following section).

In conclusion, it seems to me that rule-based legal reasoning gains its full legal significance only when it is seen in its dialectical connection with the particularistic appreciation of individual cases, rather than as an alternative to it. The same also holds for the intuitive appreciation of individual cases, whose importance is stressed by Philip Heck, a leading representative of the anti-formalistic movement of the end of the 19th century:

> The intuitive feeling [namely, the *Rechtsgefühl*] can provide the very decision of the case, but also major premises and value judgements that then lead to the decision of the case by way of normative reflection. [...] This intuitive acquisition of legal results (*intuitive Rechtsgewinnung*) is based upon the unaware combination of all pieces of knowledge and all experiences, not only with regard to the content of the laws, but also with regard to the extension, the direction and the meaning of the life interests in question. (Heck 1968 sec. 16.9; my translation)

However, the *Rechtsgefühl* is not infallible: "even the intuitive feeling can make mistakes and under the influence of reflection it can be recognised as misleading, so that it disappears completely" (*ibidem*). Thus its outcomes should be to be controlled through trained reflection:

> The claim of the *Rechtsgefühl* is in a large measure accessible to the control of reflection and needs such control. Only an appropriate verification protects against mistakes and ensures that the law is respected." (*ibidem*)

The same fallibility also inheres, however, in the attempts to provide an explanation-justification of a certain individual decision according to general rules: the very decision-maker may fail to appreciate the real legal grounds of his or her decision (all the legally relevant factors that pushed toward a certain outcome) and may thus provide a mistaken or partial account of such grounds when formulating the corresponding *ratio decidendi*.

In conclusion, it seems to me that it is possible to view universalistic rule-based thinking and particularistic evaluations as complementary components of a unique cognitive process.

7 Logic and Defeasibility

As I have observed above, Perelman criticises the "logical" approach to problem-solving as being based upon a wrong assumption: resorting to a rule-based (anticipatory) approach requires assuming that "the unforeseen has been eliminated, that the future has been mastered, that all problems have become technically soluble." How can we frame and apply universal legal rules (according to the syllogistic model), if there may always exceptional situations in which the application of the rule appears to be iniquitous, inappropriate, unjust?

Here MacCormick's answer consists in affirming that legal rules are universal but defeasible: their universality of the reasons they express is consistent with the idea that under particular circumstances these reasons may be countered and possibly outweighed.

The subject of defeasibility is addressed again in chap. 12 of the book, entitled "Arguing Defeasibly."

At first MacCormick attaches defeasibility to particular legal arrangements (like a contract or a will). He says that such an arrangement may be subject to "invalidating events", which may bring about its defeasance.

He then considers various forms of defeasibility. First of all there is *express defeasibility*, which arises from the fact that a legal provision expressly makes a legal result dependent upon "some exception or proviso" (page 241). Express defeasibility, he argues, does not consist in adding negative conditions to the rule establishing that result, since it also impacts on the burden of proof.

However, MacCormick argues, what is more interesting is implicit defeasibility: there are situations in which a legal result, though stated in an explicit legal provision, does not take place, since "it is trumped by recourse to some unstated condition that is deemed to be implicitly overriding, given the principles and/or values at stake" (page 243). MacCormick views implicit defeasibility as being connected to the way in which the law is formulated: the express formulation of the law does not (and cannot) take explicitly into account all possible exceptions. Not only would this assign to the legislator an impossible task, but it would also compromise the clarity and conciseness of the law.

According to MacCormick, defeasibility is linked to the burden of proof, and thus has a pragmatic content, being concerned with what is to be done to argue a legal case successfully However, he criticises the idea that defeasibility only concerns the pragmatics of law enforcement, namely, the idea that legal conclusions are defeasible since the courts may contradict our expectations. For him defeasibility does not consists in the fact that the courts may reject a claim, but it rather consist in the fact that there are "legally justifiable exceptions to ordinarily necessary and presumptively sufficient conditions, exceptions which ought to be made when the question is put to a court."

It is not clear, however, if MacCormick views a normative result subject to a defeating condition as existing or not, in the case that a defeating condition has taken place. but a judge has not yet established that this is the case. Is a person responsible or not, when he caused damage in a state of incapability, but the judge has not (yet) established that this is the case? Is a person entitled or not to inheritance, when she killed the testator, but the judge has not yet established that this was the case? My view is that an exception is effective (it has an impact on the legal states of affairs, on the law as an "institutional reality"), even when the judge has not yet established it (and even when the issue of the existence of such an exception will never be brought to the attention of a judge). There may indeed be cases where a judge is vested with the power to cancel a legal outcome (consider, for example, the cases where a judicial decision is required

in order that a contract is voided or that an administrative decision is annulled), but this does not apply to defeasible legal conclusions in general. It is true, a judge may be called to decide whether a defeating circumstance obtains, and only if this judgement is positive, will the judge deny that the result obtains. However, this is a general feature of any legally relevant fact: the judge will consider a fact established and decide accordingly only if he or she believes that the fact has been proved in the judicial proceedings, but this is no reason for concluding that the fact does not exist and has no legal effect, unless a judge declares that it has taken place.

As a general evaluation of MacCormick's account of defeasibility, I may say that he is able to provide in a few pages a clear introduction to the most significant legal issues involved in legal defeasibility, an introduction that will be useful for anybody who intends to address this issue, and that it is specially useful for the way in which it connects a general view of it and the discussion of concrete cases.

The aspect which could undergo a critical scrutiny is the direct link which MacCormicks establishes between defeasibility and pragmatics, both the pragmatics of legislative legislative texts (where a defeasible formulation may contribute to clarity) and the pragmatics of judicial decision-making (where defeasibility is connected to the burden of proof).

I believe that it is possible to give a broader account of defeasibility which distinguishes three different aspects of it, which I shall consider in the following sections, namely, ontic defeasibility, cognitive defeasibility, and procedural defeasibility.

8 Ontic Defeasibility

First of all, defeasibility has an *ontic* aspect, namely, an aspect which is related to the nature of morality and law: there are facts (empirical or institutional states of affairs or events) that are normally sufficient to determine certain legal or moral outcomes, but can be made irrelevant (undercut) or can be outweighed (rebutted) by further facts. Thus, when seen from the ontic perspective, defeasibility does not pertain to conclusions nor to rules, but rather to facts, in the sense of relevant aspects of the situation at issue, and it concerns their ability to constitute normative (legal or moral) qualifications and effects. Here is how the celebrated philosopher Ross (1939, 84) puts it:

> Any possible act has many sides to it which are relevant to its rightness or wrongness; it will be pleasure to some people, pain to others; it will be the keeping of a promise to one person, at the cost of being a breach of confidence to another, and so on. We are quite incapable of pronouncing straight off on its rightness or wrongness on the totality of these aspects; it is only by recognising these different features one by one that we can approach the forming of a judgement on the totality of its nature.

Thus each of an act's aspects, according to Ross, only is a defeasible *ontic reason* (or constitutive reason) for the act's moral qualification (as being right or wrong). Similarly, the features and circumstances of an act may represent ontic reasons for its legal qualifications (as being permitted, obligatory, or prohibited; as being valid or invalid, etc.) and for its effects (as producing obligations, liabilities, etc.). Ontic reasons (both moral and legal ones) may support incompatible outcomes, and they may have different strengths so that the weaker reasons may be outweighed by stronger ones.

9 Cognitive Defeasibility

Ontic reasons, when recognised as such (namely, as facts which normally determine moral or legal qualifications), become cognitive reasons. More exactly, the belief that an ontic reason exists (is present in the situation at hand) is a cognitive reason for inferring the belief that the constituted normative outcome exists: as the fact that one intentionally damages another is a constitutive reason determining one's liability, so the belief that one intentionally has caused damage is a cognitive reason for inferring that one is liable.

Consequently, ontic defeasibility is translated into *cognitive* defeasibility: whenever the ontic reason for a certain outcome is defeated by a contrary ontic reason, then the corresponding cognitive reason (namely, the belief that the ontic reason exists) for inferring the existence of that outcome should be defeated by a corresponding contrary cognitive reason (namely, by the belief that the corresponding contrary ontic reason exist). Thus, the ontic defeasibility of ontic reasons is translated into the cognitive defeasibility of the corresponding cognitive reasons (as being able to lead a rational reasoner to endorse the belief that the outcome supported by such reasons obtains).

Cognitive defeasibility influences the ordinary process through which one proceeds when applying the law to a concrete case. When one is interested in establishing a certain legal result in a certain context, first will one look whether there are, in the context at issue, appropriate grounds supporting that outcome (according to a rule, a principle, etc.). On the basis of the belief that there are such grounds, one would then look to see whether there are explicit or implicit exceptions, namely, reasons undercutting or rebutting the grounds supporting that result. Then one will consider whether there are exceptions to such exceptions, and so on. This cognitive process will produce only *pro-tanto* results, namely, results that can be controverted by continuing the inquiry. At a certain point, however, the inquiry will have to terminate, and one will have to be content with the results obtained at that point.

The reasoning process of defeasible reasoning appears to be a logical process when one only considers the way in which a reasoner uses the knowledge it possesses to make defeasible inferences and to adjudicate their conflict (among the logical accounts of defeasible legal reasoning, see, for instance, Prakken and Sartor 1996 and Hage 1996). Obviously, defeasible inquiries go beyond logic when one also considers the need to obtain new information (empirical or normative) for the purpose of constructing new relevant inferences.

Consider, for example, the case of a person who asks his tax lawyer whether he should pay taxes on income he earned abroad. Assume that the lawyer finds a rule stating that even foreign-earned income should be taxed. However, the lawyer is aware that a number of exemptions exist, concerning different countries and different types of income (though she is not aware of the content and the preconditions of such exemptions), which provide exceptions to ordinary taxation. Therefore, she should tell the client that she can only *pro-tanto* (namely, on the basis of the information she has so far considered) conclude that the income he earned abroad is not taxed. She needs to look further into tax law to provide a sufficiently reliable answer. However, at a certain point, the inquiry needs to stop, and the *pro-tanto* conclusion will have to be endorsed (if the inquiry is believed to have been sufficiently accurate). Thus, defeasible reasoning consists in a structured process of inquiry, based upon drawing *pro-tanto* conclusions, looking for their defeaters, for defeaters of defeaters, and so on, until stable results can be obtained. This process has two main advantages: (*a*) it focuses the inquiry on relevant knowledge, and (*b*) it continues to deliver provisional *pro-tanto* results while the inquiry goes on.

10 Procedural Defeasibility

Finally, cognitive defeasibility is connected to *procedural* defeasibility, namely, to the defeasibility of the outcomes of legal proceedings, depending to the distribution of the burden of proof between the parties. According to the idea of the burden of proof, the elements which concur in determining a legal result are split into two sets: (*a*) elements that need to be proved (in the general sense of being established through justified arguments) in the legal proceedings in order to enable the judge to derive that result, and (*b*) elements that do not need to be proved, but the proof whose complement (the complement of a positive fact A is its negation $\neg A$, and the complement of a negative fact $\neg A$ is A) prevents the judicial derivation of that result. Thus, the party interested in establishing a certain result has the burden of proving the facts of the first kind, while the counterparty has the burden of proving the complements of facts of the second kind (for a formal model of the burden of proof, see, for instance, Prakken 1999)

In general, procedural defeasibility tracks cognitive defeasibility: when there are no specific rules or ground to the contrary (like the need to protect the weaker party, or to support the party who usually lacks the opportunity to prove the facts at issue) the facts to be proved for establishing a legal result are the reasons supporting that result, while the facts whose proof would prevent deriving that result are the reasons defeating the former reasons.

However, this general (defeasible) principle can be derogated on various ground. For instance a legislator with regard to product liability can either establish that that a company is liable for damage only if the company's negligence is proved, or establish that negligence needs not to be proved but that the proof that there was no negligence prevents the derivation of liability. According to the second policy (but not according to the first) the company will be declared liable also when there neither negligence nor his absence could be established.

11 Conclusion

MacCormick's book represents a very important contribution to the theory of legal reasoning, a contribution where the author competently, with admirable style and deep insight, leads us through the complexities of legal theories, doctrines and cases. It is significant not only for legal theorist, but also for lawyers, and even for experts in legal logic and legal informatics. Let me however, conclude my discussion of it, by pointing to a couple of points where I find that something is missing.

With regard to the role of logic, in legal thinking, MacCormick's analysis could possibly be integrated on the one hand with a broader view of logic, and on the other hand with an additional emphasis on the fact that legal abstractions arise from particular intuitive reactions to concrete cases but also contribute to shaping and controlling such intuitive/particularistic reactions.

With regard to MacCormick's account of defeasibility, it seems to me that, though capturing the main features of legal defeasibility, such an account leans to much toward procedural defeasibility, while I believe that the latter should be integrated with, and even viewed as dependent upon, what I called ontic and cognitive defeasibility.

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