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Incommensurability, proportionality, and defeasibility

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At least in some cases, the values confronted in legal decision-making appear to be incommensurable. Some legal theorists resist incommensurability because they fear that this presents an overwhelming obstacle to rational decision-making. By offering a close analysis of proportionality and, more particularly, measures of proportional value satisfaction, I show that this fear is unfounded. Comparative measures of proportional value satisfaction do not require the values to be commensurable. However, assuming incommensurability presents us with the problem of public significance in the proportional satisfaction of values. When two values are commensurable, this public significance is provided by the mediating effects of the overarching third value that provides the common measure of the values. However, when this common measure is removed, then the public significance of value satisfaction must be otherwise achieved. This is why I propose an *equal* proportional value satisfaction as the most appropriate proportionality maximand. Under equal proportional value satisfaction, the proportional satisfaction of any one value has significance for each and every other value. This kind of public significance is interpersonal rather than impersonal (or second-personal rather than third-personal). The article then shows that the legal process that is most appropriate to equal proportionality is a process that implements defeasible legal rules.

Keywords: rules and principles; balancing; pluralism and incommensurability; rational decision-making; proportionality; defeasibility.

1. Accommodating values under rules and principles: the differences and similarities

It has become increasingly accepted that legal decision-making makes use of two distinct kinds of norms, namely, rules and principles. Rules are norms that, given the satisfaction of certain antecedent conditions, 'definitively command, forbid, permit, or empower' (Alexy, 1992, p. 146). While the rule may call for an interpretation as to whether some particular case or instance falls within its conditions, once the rule is found to be applicable it applies 'all or nothing', not in degrees. 'If the facts a rule stipulates are given, then either the rule is valid, in which case the answer it supplies must be accepted, or it is not, in which case it contributes nothing to the decision' (Dworkin, 1977, p. 24). It follows from this that there cannot be a rational conflict of applicable rules.

To avoid conflict between rules there must occasionally be an adjustment in the specification of the rule so that the conflict is removed. This is the stuff of exceptions. Here is how Ronald Dworkin describes the adjustment process:

> Of course a rule may have exceptions . . . . However, an accurate statement of the rule would take [these exceptions] into account, and any that did not would be incomplete. If the list of exceptions is very large, it would be too clumsy to repeat them each time the rule

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> is cited; there is, however, no reason in theory why they should not all be added on, and the more there are, the more accurate is the statement of the rule. (Dworkin, 1977, pp. 24–25)

Thus, there can be exceptions to a rule, but only in the very limited sense that blends all exceptions into the most accurate summary statement of the overall rule.

Principles, as both Robert Alexy and Ronald Dworkin have emphasized, have a very different structure from rules (Alexy, 2002, pp. 44–60; Dworkin, 1977, p. 25). They do not purport to set out the conditions for their definitive application. Rather, they state a reason for inclining a decision in some direction without necessitating any particular result. Further, they have a dimension that rules do not, namely, the dimension of weight. Thus, when two principles are applicable to some decision, and yet conflict in the different directions that they incline it, the final decision is a matter of balancing the two principles against one another.

Despite the claim to a fundamental difference between rules and principles, this brief discussion also shows them to have some basic similarities as well. First, both are single-stage, or 'flat', methods for accommodating conflicting values or normative considerations (Fletcher, 1985, p. 951). This is most easily seen in Dworkin's characterization of rules; when they are complete, they 'swallow their exceptions' into a more accurate final specification of the rule (Finkelstein, 2000). For example, where for a moment we might have been tempted by the simple and more general rule $p \rightarrow q$, upon re-consideration we know the rule to be the more qualified p & *not-*$r \rightarrow q$. There is no sense in which we can properly operate under the more simple and general rule $p \rightarrow q$ at one stage, and then introduce the qualification r, which might limit the application of the rule at some second stage. Rather, we are committed under this single-stage interpretation of the rule to negate the possibility of r (if the rule is to be applicable to the decision) from the very beginning.

The accommodation of conflicting principles also shows the same flat structure. All the conflicting principles are brought together and balanced in a way that requires that we attend to their relative weights at one particular moment. This is what the weighing metaphor suggests, and what makes the model of principles appear less categorical (or absolute) than the all-or-nothing model of rules. Again, we might have allowed some principle a kind of lexical priority in its application to some decision, and then allowed in a secondary principle only to break ties at a second stage of the decision-making process if the absolutely prior principle was not sufficiently decisive at the first stage. But that would not be to use the model of principles and the idea of relative weight. While some principles might have more weight than others in certain circumstances, no one principle has any absolute priority at some earlier stage of the decision.

This first similarity between rules and principles, namely that both are flat or single-stage norms (at least as they are typically understood), suggests a second similarity as well. Both require or emphasize the importance of an overarching 'third' value that provides the measure of the relative worth of any two rules or principles. In the case of rules this value is 'truth' or 'accuracy' in the statement of the rule, something that Dworkin's remarks make quite clear. Initially, the rule *appeared* to be $p \rightarrow q$, but more accurately or truthfully stated, the rule is p & *not-*$r \rightarrow q$. After all, in circumstances r it is simply false to claim the applicability of the unqualified rule $p \rightarrow q$, and our concern for truth and accuracy is ultimately what obliges us to select the second more qualified rule to govern the (single-stage) decision in the case.

And in the case of conflicting principles the metaphor of balancing also suggests some ambient space within which the balance scales operate and which determines the relative weights of any two principles. For some this is precisely what makes the metaphor of balancing so controversial, since it

appears to presuppose (indeed, for some it seems to require) some kind of commensurability between any two principles or values which otherwise might look to have a very different nature. This commensurability (or common measure) is provided by the overarching third value.

In this article I develop an account of legal norms that challenges both of these respects in which rules and principles, at least as they are typically construed, are viewed to be similar. That is, I shall argue both against a single-stage process of rule application and against the use of an overarching third value that provides for commensurability in the balancing of (plural) principles. In making the first argument I shall be arguing, *contra* Dworkin, for a model of *defeasible* rules which can allow, say, for a two-stage process where it is possible that both (i) $p \rightarrow q$, and (in violation of the more usual monotonicity requirement) (ii) $p \ \& \ r \rightarrow \textit{not-}q$. And in making the second argument I shall be arguing for comparisons of the *proportional* satisfaction of different principles or values, a mode of balancing that does *not* require commensurability or the weighing of different principles under some third value.

Of course, there is nothing new in someone arguing for defeasibility and proportionality. Both ideas have strong support in contemporary legal theory (Hage, 1997; Alexy, 2002). However, I hope to show an important link between the two ideas. Precisely because comparisons of the proportional satisfaction of different values or principles do not require commensurability under some third value, the most compelling maximand of proportional value satisfaction will be *equal* proportional value satisfaction. This is a maximand that, in the litigation context, substitutes a kind of *interpersonal* public significance between the values for the *impersonal* public significance of values that has been lost when the commensurability of plural values is denied. It is this interpersonal significance of plural values, best recognized under the idea of equal proportional value satisfaction, which is provided for in a fair process of defeasible rule application.

Hence the title of this article, which connects these themes: 'Incommensurability, Proportionality and Defeasibility'. The next section will begin by forging the connection between incommensurability and proportionality. Section 3 will connect the idea of equal proportionality to a process for the application of defeasible rules. The article concludes with a brief summary of the argument in Section 4.

2. Pluralism and proportionality

2.1 *Proportionality as incommensurable cardinality*

When the law confronts a choice between principles, for example, the choice between protecting security of the person and respecting freedom of religion, or between respecting freedom of expression and privacy, the choice is difficult because the values involved seem irreducibly plural in their nature. That is, the values seem not only irreducible one to the other but also not reducible to some third value that could possibly provide a common measure, or commensurability, for them. Yet, without commensurability of the principles or the values that are at stake in the choice, how is one to proceed rationally? How is one to balance one consideration against the other? It is tempting to conclude that any choice we make must be arbitrary, an act of pure will rather than reason.[1]

[1] One critic of the possibility of rational choice in the face of incommensurability is Justice Antonin Scalia of the U.S. Supreme Court. In his dissenting opinion in *Bendix Autolite Corp.* v. *Midwesco Enterprises*, 486 U.S. 888, 897 (1988), he characterizes the balancing of competing interests as pure illusion: '[T]he scale analogy is not really appropriate since the interests on both sides are incommensurate. It is more like judging whether a particular line is longer than a particular rock is heavy.' Jürgen Habermas has also argued that balancing in cases of conflict between principles is done 'arbitrarily' and without 'rational standards'; see Habermas, 1996, p. 259.

However tempting this conclusion might be, it should be resisted. It is true that, if two alternatives are commensurable, that is, they share a common measure that goes to their overall relative value, a rational choice between the two seems unproblematic: choose that alternative which has the higher value under this common overall measure. In this way the commensurability of the values in the alternatives implies a rational decidability between them. The problem arises when the converse proposition is asserted, that is, when it is asserted that incommensurability implies non-decidability.[2] This is simply false. There can be a rationally defensible choice of one alternative rather than another without there being (in anything more than a trivial sense) *some particular respect in which* the one alternative is better than the other. Comparability of choices, or decidability between them, does *not* imply any commensurability of the values expressed in those choices.

A solid appreciation of what is meant by proportionality shows how this is true. Measures of the proportional satisfaction of plural values require cardinality in those scale measures (so that a 10% gain in value satisfaction anywhere on the *same* scale between 0 and 100% is an *equally* significant gain), but they do not require any *inter*-scale commensurability of (or what we might call *co*-cardinality in) those cardinal measures. Indeed, any comparison of proportional satisfaction of two different values will be completely invariant to changes in any measure of commensurability, thereby indicating the comparison's insensitivity to, or lack of dependence on, such commensurability measures.

To see this clearly, consider the following analogy. Suppose that your barrel and my barrel have each been drained of one third of the water that filled them, that is, an equal *proportional* draining. This tells us nothing about how much water was drained from each barrel. For that we would need to know something about the relative size, or commensurability, of the two barrels. If your barrel was twice as large as mine, then an equal proportional draining would mean twice the water was lost from your barrel; if yours was twice as small then half as much would have been lost. However, knowing this one way or the other would do nothing to alter the fact that our barrels had been subject to an equal proportional draining. The measure of proportional impact is invariant to (or insensitive to, not dependant upon) such commensurability measures.

What is true of the proportional draining of barrels is also true, at least in theory, of the proportional impact of legal decisions on values. We can secure measures of these proportional impacts on different values, and compare them across the values, without assuming anything about the commensurability of the values themselves. This is not to say that securing such proportionality measures is something that is easy to do. One needs to be able to make sense of the complete or 100% satisfaction of some value (e.g. complete privacy), as well as a 0% level of satisfaction (no privacy at all). These are needed to set the cardinality of the scale and to secure the proportions (of privacy satisfaction or loss) in-between. While a complete filling and a zero filling (empty) are readily accessible ideas in the case of barrels, these same ideas are somewhat more elusive as measures on a scale of value satisfaction. However, while these ideas are elusive, one should not assume that comparable measures are not also required for values when, more conventionally, they are assumed to be commensurable (as they are, for example, in additive forms of aggregation like utilitarianism or cost-benefit analysis). There the same sorts of interval scale are typically required (so that we can make sense of gains and losses); the only difference is that in such situations the interval scales must *also* be commensurable. This can be an additional source of controversy in any form of legal balancing that turns on commensurability. If

[2] See, for example, Raz (1986, pp. 333–334): 'Where the considerations for and against two alternatives are incommensurate, reason is indeterminate. It provides no better case for one alternative than the other.' A leading theorist of incommensurability, Ruth Chang (1997, p. 5) has advanced a similar claim, arguing that comparability under some 'covering value' is required if a rationally justified choice is to be made between two alternatives.

different judges put different weights on the different values, then the measures of balance in the different values will be different as well. However, since the comparison of *proportional* measures of a decision's impact on values is invariant to these different weights, at least this source of controversy between judges is removed.[3]

2.2 *Different maximands of proportional value satisfaction*

There are different possible maximands of proportional value satisfaction that could be used in the comparison of choices that express plural values; all of these will require cardinality in the measure of these values, but none will require this cardinality to be commensurable across the quite different values involved. Of the following three possibilities that we shall examine in some detail, one is already well established and much discussed in the social choice literature on fair arbitration or bargaining. (It is re-interpreted here under cardinal rankings provided by incommensurable *values* rather than under cardinal rankings provided by the incommensurable *utilities* of individuals.) It has also been given a very precise axiomatization by the Nobel prize-winning economist and game theorist, John Nash, something that we will find useful as we try to isolate what is attractive and unattractive about the different maximands that we might choose. However, rather than begin with the Nash solution to the fair arbitration problem, we begin with a more intuitive example and its maximand. Then, after discussing the Nash solution, we will turn to the maximand that appears closest to what is discussed in law and legal theory.

2.2.1 *Maximum individual proportional value satisfaction.* To see what is involved in this maximand, consider how a judge, at the end of a dog show, judges 'the best dog in the show', that is, the one dog, of all the very different breeds that might be represented at the show, that is best. (Similar exercises would be involved when someone is asked to judge 'the best athlete of the year' when many different sporting activities are involved.) It is clear that the judge does not look for some common scale to make all the very different breeds of dog commensurable, nor does she employ some notion of an 'ideal dog' against which all the different breeds of dog fall short to varying degrees. Rather, she measures each dog proportionally *against its own breed scale* and chooses that dog which is highest, again proportionally, on its own breed scale. ('This Schnauzer is a better Schnauzer on the Schnauzer scale than is this Great Dane on the Great Dane scale, i.e., she scores higher proportionally on that Schnauzer scale than that Great Dane does proportionally on the Great Dane scale.') Such a comparison does not require any commensurability between the different breeds of dog. Indeed, two judges, one of whom very much liked Schnauzers and the other of whom much preferred Great Danes (that is, two judges who assigned quite different 'weights' to the two breeds of dog) should, in theory at

[3] It is somewhat ironic, therefore, that a common criticism of proportionality analysis is that it assumes some controversial form of commensurability. See, for example, Tsakyrakis (2009, p. 471). However, as is clear from Tsakyrakis's explicit reference to 'utilitarianism' and the need for a 'common metric', this is to confuse additive forms of utilitarianism (which do require commensurable cardinality) with non-additive proportionality comparisons (which require cardinality, but not commensurable cardinality). For further discussion of this problematic sort of criticism of proportionality, see Da Silva (2011). This is a convenient point to say that I am not arguing in this article that values *are* necessarily plural and incommensurable. Rather I am simply assuming that possibility (a possibility that seems to be taken seriously by others) and exploring how proportionality analysis might be used to address it. So, far from thinking that incommensurability presents a problem for proportionality analysis, my reader is being encouraged to think that proportionality might present us with a solution to the problem of incommensurability.

least, choose the same dog as best in the show, since these proportional assessments on each breed scale are invariant to the different weights one might assign to the different breeds of dog.

So the judge at the dog show exemplifies one way of using proportional (i.e. non-commensurable cardinal) assessments of the values expressed by different alternatives for choice. The idea is to choose that option or alternative which maximally satisfies any one of the different values at stake. Indeed, we could take this method of judging, or choosing, one step further. Suppose that we had two such dog shows and we wanted to assess which dog show had the better show of dogs (or, again more generally, which of two alternatives for choice better satisfied the different values at stake). We might think that we would proceed similarly, that is, that we would now assess which of the two dogs, each judged 'best in show' at their particular dog show, was better. Where before we would have been choosing that alternative which maximized the proportional satisfaction of some individual value (or breed scale), now, across the different shows, or different alternatives for choice, we would be choosing that alternative which maximized over these different maximums (what some might call a 'maximax' exercise). And if this maximax exercise led us to a tie because the best dog in each show was equally good (proportionally) on its own breed scale, we could go on to break the tie by asking the judge to consider the runner-up, or second place, dog at each show, again with a view to how each did proportionally on its own breed scale (what some might call 'leximax' in that, like an alphabetical or lexicographical ordering of words in a dictionary, second place dogs, like second place letters, are only considered if first place dogs, or letters, are tied).[4] And we could go on to the third placed dog if necessary (and so on). In all these different choices or decisions, the *commensurability* of different values, as expressed in the dog shows by the different breeds of dog, would have no role.

However, we now begin to see, as we compare different dog shows, or different alternatives with different values at stake, what is problematic about choosing that alternative which maximizes the proportional satisfaction of some individual value (even if we give each such value equal consideration for that possibility). Even if we let in the consideration of other (second- and third-placed) dogs, or values, to break ties, this sort of maximand (in either its maximax and leximax version) does not give an adequate (simultaneous) consideration to *all* the different dogs, or values, in an assessment of how good a dog show, or choice alternative, it was. The quality of the one best dog in the show (or at most the second-placed dog in the unlikely event of a tie) determines our judgement of the dog show as a whole; more generally, the one value that is proportionally most satisfied on its own scale determines that the option which achieves that value at that level of proportional satisfaction is best overall. But it could be that a dog show with a large number of very fine dogs, that is with a large number of dogs each of whom stands very high, proportionally, on its own scale, will be judged second-best as a dog show to one whose one best dog is the winner under maximax. This seems inadequately to integrate a concern for *all* the dogs in the different shows and, more to the general point here, seems to offer an inadequately integrated evaluation of all the different values that these different dog breeds, or levels of

[4] In social choice theory there are axiomatic formulations of analogous 'maximax' and 'leximax' social choice rules. However, these axiomatic formulations assume commensurability in the *levels* (not the gains and losses) of satisfaction of the different rankings of alternatives and so are not applicable for the sorts of proportionality (i.e. non-commensurable cardinality) comparisons being discussed here. For a typical axiomatization, see Sen (1982, 236n.15), who also usefully points out the connection that these commensurability results have to Arrow's original dictatorship result; see Arrow (1963). In Sen's axiomatizations of 'leximax' (and, analogously, 'leximin') we end up with the dictatorship, not of a particular *person*, as in Arrow's original theorem, but of a *position*, in particular of that ranking which is most (maximax or leximax), or least (maximin or leximin), satisfied. This is the feature that is shared by the leximax proportional satisfaction comparisons that are discussed in the text of this article, albeit in a context that does not assume commensurability (either in the levels of, or gains or losses in, satisfaction).

proportional satisfaction, might represent. To make a judgement over the proportional satisfaction of values more generally when we are choosing between alternatives, we appear to be in need of a different, more aggregative, maximand. This is where the Nash solution can make a helpful appearance.

2.2.2 *Maximum aggregate proportional value satisfaction.* John Nash (1950) provided what he thought was a fair and attractive (arbitration) solution to the bargaining problem that arises between two (or more) individuals who seek mutual gains over some status quo. However, we can easily adapt his solution to the problem that we are dealing with here, namely, to find a normative basis for the fair and attractive accommodation of the different values that are in play in some social or legal choice (Chapman, 2010; Luban, 1990; Sen, 1970, pp. 118–130; Veel, 2010). The special attraction of Nash's solution is that he based it on the individuals' rankings of the different possible bargains that could be struck and he assumed that these (utility) rankings were both cardinal and non-commensurable across individuals. Thus, by assuming incommensurable cardinality in his rankings he effectively adopted a framework based on proportionality. Where he measured the proportional gains from some real status quo (an obvious starting point for a solution to a bargaining problem), in our analogous exercise for a fair accommodation of the rankings of plural and incommensurable values we can think of the point from which proportional gains should be measured as a *hypothetical* social state (or a theoretically available alternative choice) in which all relevant values achieve zero satisfaction.[5]

What was Nash's solution to the bargaining problem? Nash proposed that a fair solution to that problem was to maximize the multiplicative *product* of the preference or utility gains of all the bargainers over the status quo. By proposing the multiplicative product of those gains, rather than the more conventional additive sum, Nash provided a solution that was insensitive in its ordering of various possible alternative bargains to the different weights that we might assign to the preference or utility gains of different individuals. Different relative weights would simply re-scale the multiplicative product, but leave unchanged the social ordering of the different possible alternative bargains that might be chosen as best (Chapman, 2010, p. 190). This is the feature of the Nash solution (namely its insensitivity or invariance to changes in the weights that we might attach to the different cardinal rankings and, therefore, to the corresponding measures of particular cardinal gains) which captures the idea of incommensurability across those rankings.

[5] Nash simply assumed an incommensurable cardinal scale for each individual bargainer *directly* (i.e. without needing to specify another state beyond the status quo to provide his interval scale). In our analysis of proportionality we are *constructing* that same sort of cardinal or interval scale by specifying both a zero point and an (equally hypothetical) ideal point, that is, a social state where all values receive full proportional (or 100%) satisfaction. It should be emphasized that because the zero point and the ideal point are entirely hypothetical (their characteristics being defined by the independent requirements that each value has for zero and complete satisfaction, i.e. no *actual* social state defines the zero or ideal points for the different values), the zero and the ideal point do not provide any 'anchors' (independent of what is needed for each value on its own terms) for the possible commensurability of the values (e.g. we could change the zero for any one value, and so change how the hypothetical zero point social state is described for *that* value, without changing anything for another value). This allows the proportional satisfaction scales for each value to have a kind of *intra*-scale *ratio* significance (i.e. for each value scale, because there is a meaningful zero point for that scale, it will make sense to speak of meaningful ratios of satisfaction of the value, e.g. that a certain social state satisfies the value twice as much as some other social state) without these ratios having any sort of substantive *inter*-scale, or commensurable significance (i.e. without it being meaningful to say that one value is twice as much satisfied in this social state as another value). Thus, while our value scales (like those of Nash) are *inter*-scale incommensurable, they have stronger *intra*-scale properties than those of Nash (in being ratio scales). However, none of this affects any claim made in the text.

Of course, Nash did not come up with his solution immediately. Rather, he postulated a set of four fundamental axioms that he thought a good solution to the bargaining problem would need to satisfy (Nash, 1950). Further, he proved a uniqueness theorem on these axioms, viz., he showed that the *only* method of choosing that satisfied these axioms was the multiplicative product rule that he proposed. Thus, the four axioms are the necessary and sufficient defining axioms for his rule, something that makes it interesting to look at these axioms more closely.

The first of the four defining axioms captures the idea that the rankings provided by the individuals are cardinal but not interpersonally commensurable, that is, that they only involve (for our purposes, the equivalent of[6]) *proportionality* comparisons. The second is an axiom that insists on *anonymity*, namely, that if the different cardinal rankings are permuted across different individuals (so that different individual names are associated with different rankings), but are otherwise unchanged, then the social ordering of possible bargaining solutions (or our choice of what is the best solution among them) should not change. A ranking might have some different impact because of changes in the sort of *ranking* that it is, but not because of *who* has it. Third, if all the rankings rank some bargaining solution x as better than some other one y, or if some ranking ranks x better than y and no other ranking ranks y better than x (a variation that allows for indifference in some rankings), then the solution should not be y if x is available. This third axiom is usually termed the *Pareto* criterion and seems to secure the possibility of a gain (according to some individual ranking) in situations where there is no loss (according to any ranking). Finally, Nash insisted that his solution satisfy a *choice consistency* axiom, namely, that if some bargain x is chosen best in a large (super-) set of possibilities, and then that set of possible bargains is reduced to a subset that still includes the previously chosen alternative bargain x, then that solution x (and only that solution) is still to be chosen best in the subset. While this might seem cumbersome, as a choice consistency condition it simply ensures that the Nash solution reflects a well-behaved social ordering of possible choices, the sort of thing that one can sensibly maximize, or from which one can select some best alternative. (The logical equivalence of certain ordering-theoretic rationality requirements with particular choice-theoretic consistency conditions is proved in Arrow (1959) and Sen (1982, pp. 41–53, pp. 118–124).)

So now we can assess the overall suitability of the Nash solution either directly, as the product rule, or indirectly, by way of its four defining axioms. In the latter sort of discussion we will not want to second guess the first axiom, namely the one that insists that this solution be based on incommensurable cardinality or proportionality comparisons. After all, once we take pluralism seriously,[7] the range of possible maximands is limited to those assuming proportional value satisfaction; so all our proposed solutions will satisfy this axiom. Therefore, our focus needs to be on the other three defining axioms, namely, anonymity, the Pareto criterion and choice consistency. All seem reasonable enough, but a careful re-consideration of the axioms begins to suggest that the Pareto condition might be problematic.

Recall that the Pareto condition (in the context of proportionality comparisons) supports choosing an increase in the proportional satisfaction of one value if there is no loss in proportional satisfaction of any other value. This sounds irresistible; why would anyone not want to support securing a gain without a loss? But suppose the increase in proportional satisfaction was to that value that was already the most satisfied proportionally? Then the Pareto increase in proportional value satisfaction would increase the *inequality* of proportional value satisfaction even if it did not decrease the proportional satisfaction of any value.

[6] See note 5.
[7] See note 3 above.

Should this increase in inequality matter to us? Is there something attractive about a more equal proportional satisfaction of values? Perhaps we can understand a concern for the equal treatment of *persons*, but an egalitarian concern for the proportional satisfaction of *values* seems more problematic, particularly if it might mean giving up a gain in the proportional satisfaction of some value where there is no corresponding loss, the sort of thing from which the Pareto criterion would save us. However, we can collapse the distinction between our treatment of persons and values if we think of each of Nash's bargainers as a kind of guardian or fiduciary, bargaining somewhat single-mindedly for the satisfaction of one particular value (Luban, 1990, p. 71). Now any increase in the unequal treatment of values amounts to an increase in the unequal treatment of the persons advancing those values. This might move us more, at least if we have any egalitarian instincts.

Also, linking the equal accommodation of values to the equal accommodation of persons (and their values) can help us to see what is problematic about the Pareto criterion in a different way. Recall that we were moved to consider the possibilities of maximizing an *aggregate* of proportional value satisfaction (as in the Nash solution) because the maximization of *individual* proportional value satisfaction (as in the dog show) seemed insufficiently attentive to all the values taken together; one value (the one that was satisfied at the highest proportional level) effectively decided what was best overall. While such a decision seems to recognize the significance of that one value (or, anonymously, any other value just like it in its achieving the same level of proportional satisfaction), it fails to provide adequately for the significance of other values. Again, if we were to link single values to particular persons, we might say that the maximization of individual proportional value satisfaction provides only for a *private* significance to value satisfaction (for that one person or value at that highest level), but not for any sort of *public* significance (for all the persons or values).

But is the Nash solution obviously better in this respect? What, exactly, is the public significance of an aggregate of value satisfaction measured as the multiplicative *product* of the different levels of proportional value satisfaction? We can imagine (for the more conventional forms of aggregation) what the public significance of an additive *sum* of such values might be, or at least how such a public significance would be determined. It would be determined by the third overarching value that provides for the impersonal commensurability of the values, something that the additive form of aggregation requires and, further, claims is sensible (but see Taurek (1977) and Chapman (2012b)). However, in the Nash solution the multiplicative form of the product rule renders any such claim to commensurability vacuous. So this particular *impersonal* form of public significance is lost.

Further, we can see the same difficulty in the Pareto criterion. While an increase in the level of proportional satisfaction of one value (with all other values unchanged) is obviously of *immediate* significance to *that* value, it is not, as such, of any immediate significance to any other value. And, without an assumption of commensurability, the possibility of attaching public significance by way of the *mediating* effects of such an increase on a third overarching value is also denied. So, in the context of the Nash solution (more specifically, in the context of the proportionality axiom that he assumes), the Pareto criterion can at best only claim a private significance, not a public one. To claim a public significance for our approach to plural values, we need to look for a different sort of maximand. Interestingly, this seems to be exactly what is provided for in the law's use of *equal* proportionality.

2.2.3 *Maximum equal proportional value satisfaction.* Under this last maximand we would choose to maximize the equal proportional satisfaction of the different values. That is, we would maximize the proportional satisfaction of any one value, so long as we could also achieve the same (or closest to the

same) level of proportional satisfaction of any of the other values.[8] Arguably, this is what the courts do when they attend to the proportional satisfaction or impact of different possible decisions on quite different values (usually some state interest on the one hand and some individual's constitutional right on the other). Like the Nash product rule (and unlike the dog show rule), this maximand obliges us to attend to the proportional satisfaction of more than one value. But, unlike for the Nash rule, the obligation to equality could mean that the Pareto criterion would be violated, since (as already suggested above) the greater proportional satisfaction of the value that was already at the highest level of proportional satisfaction would increase the inequality of proportional value satisfaction if the proportional value satisfaction of the other values were themselves unchanged (and, even if also changed for a higher level of satisfaction, were not changed proportionally as much).

However, despite the possible violation of the Pareto criterion (indeed, partly because of that), this maximand *does* attend to the public significance of proportional value satisfaction. In holding the proportional satisfaction of any one value hostage to the (equal, or closest to equal) proportional satisfaction of any other value, the satisfaction of each value has an obvious significance for the satisfaction of every other value. This is a form of public significance in the satisfaction of values (where, again the public aspect is more easily appreciated if we think of different persons acting for different values), although it is not the sort of *impersonal* public significance of values that we see under commensurability. Here the public significance is more *interpersonal* than impersonal (or what Stephen Darwall (2006) has called 'second personal' rather than 'third personal') in that the equality relation holds directly, or immediately, between the values and is not (because under proportionality measures it could not be) mediated by some measure of relative weights provided by a third value. Under an equal proportional value satisfaction requirement, the satisfaction of each value (or person advancing that value) is held accountable to, *and only to*, the (equal) claim that any other value (or person advancing that value) has to be so satisfied.[9]

[8] A slightly different version of this 'equal proportional value satisfaction' idea would have us maximize the *gains* in proportional satisfaction of any one value (or minimize the losses) so long as we could also achieve the same (or closest to the same) gains (or losses) in proportional satisfaction of any of the other values. However, this variation (unlike the one that attends to the *level* of proportional satisfaction that is achieved for any value between its two hypothetical points of zero and complete satisfaction) does give a privileged role (indeed, the *same* privileged role) to an actual status quo from which equal proportional gains and losses are measured and, therefore, introduces a form of commensurability in the equality of that starting point for the different values. Because the version of the equal proportional satisfaction of values that is proposed in the text does not do that (see note 5 above), it is to be preferred as a choice rule that is designed in part to be responsive to the problem of incommensurability. I am grateful to Ralf Poscher for encouraging me to consider this alternative possibility.

[9] In presentations of this argument I have found that, at this point, some persons begin to reconsider their support of the incommensurability assumption, which, at least in part, motivates the argument in this article (see note 3 above). That is, they begin to sense that some values may really *be* more weighty than others (i.e. they are not so incommensurable after all), and they become uncomfortable with the apparently equal treatment of these unequal values under the 'equal proportional satisfaction' rule. It is worth noting at this point that the use of proportionality comparisons in law (what some call proportionality *stricto sensu*) typically occurs at the end of a litigation sequence, when certain considerations have already been set aside, or filtered out, for their lack of (roughly) comparable significance. For example, in the use of proportional comparisons in the context of constitutional law, where some individual's constitutional right is being 'balanced' against some legislated state interest, the first step is often to determine whether the state interest is 'sufficiently important' or 'proper' to warrant a possible limitation of that right. As a consequence, *obviously* less weighty considerations will not enter the proportional impact comparison at the final stage and, therefore, only those considerations or values that, while strictly incommensurable, are nevertheless appropriately 'weighty', will. Section 3 of this article develops the structure of such a litigation sequence in more detail, and argues for the close affinity that the prior (filtering) sequence has with the final proportionality comparison.

3. Equal proportionality and defeasible rules

This reference to an interpersonal public significance of values already takes us a long way towards forging the connection, promised at the beginning of this article, between the idea of proportionality and the idea of a legal process committed to the multistaged application of defeasible rules. For holding the proportional satisfaction of some value hostage, or accountable, to the equal (or closest to equal) proportional satisfaction of another value is very much akin, structurally, to holding one agent or litigant answerable to the (reasonable) claims of another agent or litigant. And, again, the connection is almost immediate if one thinks of the different agents as acting (perhaps single mindedly or fanatically) on behalf of different values.

However, one might still question how close all this is to a process of *defeasible* rule application in particular. What is it that connects an equal proportionality assessment to claims made under multistage defeasible rules rather than Dworkin's more accurately stated single-stage summary rules? Can we not provide for the public interpersonal significance of equal proportionality under Dworkin's model of rules? After all, in that model individuals also advance values and make interpersonal claims under rules. Why is this not a process that can effectively implement, or even maximize, the equal proportional satisfaction of values?

The problem is that Dworkin's single-stage model of rules does not provide for a legal process that can capture the fully public interpersonal significance of equal proportional value satisfaction. Under a single-stage rule the claims of equal proportional value satisfaction operate in one direction only. Under a fully-specified rule (that is, one that has incorporated all the possible exceptions into an accurate single-stage statement of the rule's requirements), the initial claimant under the rule, or plaintiff, makes the only claim; the respondent, or defendant, is limited to a denial of that claim and can make no claims (to values) of her own. In a way this is not surprising as it follows simply from the fact that there is really only the one (super-) value (or reason for the rule) to be advanced here, namely, the one that is accurately or correctly captured under the (perhaps very complicated and highly qualified) articulation of the rule with all its exceptions already written in. And there cannot be any possibility of reply or other claim from the defendant or respondent under a *different* rule since that would suggest that there are two rules pointing in conflicting directions, something that the model of rules also denies.[10]

Now it would be a mistake to think that the model of rules somehow privileges the values of initial claimants or plaintiffs in structuring its process of interpersonal claims in this unilateral way. It could well be, for example, that the model of rules provides for so many qualifications in its single-stage articulation of the rule that there is no possibility for the plaintiff to make any initial claim under the rule at all. In such a case it is the plaintiff, and not the defendant, who feels the burden of the model of rules and the whole truth that it seeks to achieve in its single-stage articulation of the rule (Chapman, 2012a, p. 411). But, again, it should not be surprising that the model of rules can be as effective in denying the claims of plaintiffs as it is in denying the counterclaims of defendants. After all, as a model of legal norms, it is much more committed to the *im*personal public significance of truth (or moral correctness) in the rule than it is to the *inter*personal public significance of claims and counterclaims.

[10] It is worth noting that, when two rules are specified so as to avoid conflict, one of the rules takes priority over the other. For example the two rules might be 'Enforce contracts (or keep promises) except where this would preclude saving a life' and 'Save life'. This mutual accommodation of rules is non-reciprocal; it makes the value in saving life prior. It could have been the other way round ('Save life except where this might preclude enforcing a contract' and 'Enforce contracts'). So the model of rules, depending on where it places the exception, will always prioritize one of the values in this way. The model of principles can also do this, albeit less absolutely, under different relative weights for the different values.

Indeed, the real puzzle is in explaining why a process of interpersonal claiming is really required under such a model of rules at all (see Sieckmann, 2007, pp. 195–201, and the argument that follows in this text).

Now we could have designed our maximand of equal proportional value satisfaction so that it also operated in this more unilateral way. We could have asked for the maximization of the proportional satisfaction of value *x* only so long as we achieved an equal (or closest to equal) proportional satisfaction of value *y*, but not feel so constrained in maximizing the proportional satisfaction of *y* with respect to the satisfaction of value *x*.[11] This would be to hold the satisfaction of value *x* accountable to the (equal) satisfaction of value *y*, but not vice versa, something that would violate the anonymity condition. However, in the maximand of equal proportional value satisfaction proposed above, while we have relaxed Nash's Pareto requirement (because in the proportionality context it cannot have its usual impersonal public significance), we choose to continue accepting his condition of anonymity and the fully reciprocal version of *inter*personal public significance in proportional value satisfaction that this implies.[12]

How is it that the model of defeasible rules is better structured so as to accommodate the fully reciprocal and interpersonal public significance of equal proportional value satisfaction? (For further discussion of the points made in this paragraph, see Chapman, 2012a, pp. 410–415.) Because defeasibility allows *both* for an initial claim under the first stage rule $p \rightarrow q$ *and* for a counterclaim under the responsive second stage rule $p \,\&\, r \rightarrow$ *not-q*, it provides for the possibility that values advanced by *both* the plaintiff and the defendant are held accountable *to each other*. Contrast this, again, with the model of rules where the initial claimant advances a claim under the fully articulated rule $p \,\&$ *not-r* $\rightarrow q$ and the defendant is only offered an opportunity of denial. Here both parties are really only accountable *to the truth*, the plaintiff in the limitation of his initial claim to the most truthful of all possible rules, and the defendant in the limitation of her answer to the idea that the plaintiff's claim does not fall within this truth. It is as if each party really does not need to address the *claim* of the other, the plaintiff because the defendant actually makes no claim of her own, and the defendant because the plaintiff's claim is only significant because of its truth and not because the plaintiff has chosen to make it. In a sense, each party looks past the other to the (moral) world and, more particularly, some (moral) fact in the world made salient by the rule. *It is as if each party (and the value that each chooses to advance) really has no essential role (or regard) for the other.*

The advantage of a multistage defeasible rule, by contrast, is that it *does* provide for the bilateral regard and respect that goes with having both an authority who can make a first-stage claim and an authority who can make a second-stage counterclaim in reply. Nor is the difference here just to be found in the fact that more parties (i.e. two rather than one) have the authority to make claims and the respect that goes with having that authority. For, as Stephen Darwall has argued, the making of a claim against another party provides (second-personal) *reasons* for that party to act in response to that claim. But this means that the claim presupposes that the second party is the sort of being who *can* act for

[11] Something like this happens under the model of rules and exceptions; see above at note 10.

[12] It is worth emphasizing that this suggests that the 'equality' of '*equal* proportional values satisfaction' operates less like a substantive value in its own right (i.e. less like a substantive value that might itself order the 'alternatives' and which is somehow to be accommodated, with the other values, under an appropriate social choice rule) and more like a criterion for 'proper social choice'. And the problem with the Pareto criterion, where it recommends a violation of the equality of proportional values satisfaction, is that it attends too much to the satisfaction of values as (only) a privately rather than a publicly significant matter, at least in contexts where no such public significance can be provided by the mediating effects of a space of value commensurability.

reasons, a status or capacity that commands respect on its own. So there is a kind of confirmation or reinforcement of the status or respect that the first claim presupposes of the second party in the respect that goes with that party having her own authority to make counterclaims in reply. Moreover, the authority of the second party to make counterclaims reciprocates and affirms in the first party his status as a being capable of acting on reasons, a capacity that calls for the same sort of respect that is accorded to him as an authority to make *his* (initial) claims.

This reciprocal assertion and re-confirmation of respect is lacking in the model of unilateral authority under a single-stage summary rule. There, at best, the defendant or second party respondent can only *deny* the initial all-encompassing claims of the plaintiff under the summary rule. She has no authority of her own to make claims, or to offer affirmative defences or replies, under an independent second-stage exceptional rule. So, in contrast to the multistage process that exists under defeasible rules, a process that knits the parties and their values together in a self-confirming exchange of mutual respect and interpersonal (and public) accountability, the process that begins and ends with the plaintiff making a unilateral claim under a single-stage summary rule only half-heartedly asserts respect for the responding party, the defendant, and, as a consequence, only receives a half-hearted confirmation of the status of the initial claimant, the plaintiff, in return. The full and equal confirmation of the status of the parties, and the fully public significance of the values they advance with their claims, can only be achieved under a model of defeasible rules.

These arguments show that the structure or process that is appropriate to equal proportional value satisfaction *as a content* is the structure or process of defeasible rule application. Neither the model of principles, which assumes commensurability (and thereby denies proportionality), nor the model of rules, which is single-staged or flat (and thereby denies equality), can adequately accommodate that content. However, one might still ask whether the content that is uniquely appropriate to the structure of defeasible rules is equal proportional value satisfaction. Can the connection between the two, structure (or process) and content, be forged in this direction as well? Yes, it can.

Suppose, at the end of some multistaged process of defeasible rule application, that some claim, and some counterclaim (and the values advanced under them), were not completely addressed by the other party's reply.[13] In such a situation we would have some residual values that still need to be accommodated one to the other. Think how odd it would be to have these residual values balanced under a cost-benefit or utilitarian analysis, the sorts of exercises in *additive* balancing that are more conventionally assumed in the weighing of values. Of course, we have assumed from the beginning that the values are plural and incommensurable and so *cannot* be balanced in this way. But that is not the point here. Here the claim is more that it would be very *odd* to have endured this long process of claim and counterclaim between two parties (and the different values they advance thereby), and yet have it all finish with a form of balancing that holds the final result hostage to some third value that has a standing completely independent of the process that has preceded it. If this third value is so important that it can arbitrate the solution at the end, one wonders why it did not make its appearance from the beginning, obviating the need for all this prior process. And, if it is not so important from the beginning, why is it so important at the end? Proportional value satisfaction, which does not depend on the introduction of

[13] While this article has been emphasizing the need for a method to deal with incommensurable values within (or, more likely, at the end of) some litigation sequence, it should not be thought that at various steps along the way in that sequence it could not be that some litigant might advance some argument or value that offers a complete reply to the most recent argument or value on offer at that point (e.g. a perfect excuse for some wrong that the other party has shown the first party committed). In such circumstances, there will be no need for considering the equal proportional satisfaction of any residual values. The same might happen if a litigant makes a claim where there simply is no reply.

some third value at the final hour, seems to avoid this apparent incoherence. In this respect it provides a content appropriate to the process.

Must our attention to proportional value satisfaction at this end point in the process take the form of a concern for *equal* proportional value satisfaction? It would seem so. Even if we could sensibly contemplate a process for the defeasible application of a rule that *also* permitted complete (100%, non-proportional) replies, or contemplated claims that were completely (100%, non-proportionally) without replies, as endings to that process (much like what the model of rules contemplates in its all-too-brief single stage process), if, at the end of such a process, there were claims and counterclaims (advancing values) that were not met with such complete replies, then the only form of *proportional* value satisfaction that would satisfy the equality that this process assumes is *equal* proportional value satisfaction. In other words, a defeasible process of rule application may not require equal (or even) proportional value satisfaction at *every* stage (since even within a defeasible process there would seem to be such a thing as a complete reply to some claim). However, where claims (or counterclaims) to values are met with incomplete replies, then not only is *proportional* balancing the only sensible form of balancing that could apply to these residual values, but also *equal* proportional balancing is the only form of proportional balancing that could apply within a process so marked by equal regard and respect.

4. Conclusion

In this article, we have effectively assumed that, at least in some important cases, the values that we confront in legal decision-making are plural and incommensurable. For some legal theorists the possibility of incommensurability is resisted because it is feared that it would present us with an overwhelming obstacle to rational decision-making. In offering a close analysis of what is meant by proportionality and, more particularly, by measures of proportional value satisfaction, I hope to have shown that this fear is unfounded. Measures of proportional value satisfaction, and even comparative measures of proportional value satisfaction, do not require the values to be commensurable. This feature of proportionality seems to have been inadequately appreciated, even by those who are among its strongest proponents.

However, assuming incommensurability does present us with another problem, the problem of public significance in the proportional satisfaction of values. When values are assumed to be commensurable, this public significance is easily provided by the mediating effects of the overarching third value that provides for the common measure of the values. However, when this common measure is removed, or assumed away, then the public significance of value satisfaction must be achieved in some other way. This is why I have proposed an *equal* proportional value satisfaction as the most appropriate proportionality maximand. Under an equal proportional value satisfaction, the proportional satisfaction of any one value has significance for each and every other value. This kind of public significance is interpersonal rather than impersonal (or second personal rather than third-personal, to use terms recently made popular by Stephen Darwall).

The article then showed that the kind of legal process that was most appropriate to equal proportionality as a content was a process that implemented defeasible legal rules. Dworkin's single-stage model of rules lacked the fully interpersonal significance of value satisfaction that a system of proportional value satisfaction demands because it provides too unilateral a structure for parties to make claims against one another under rules. But a multistage defeasible rule, where claims are made seriatim by different parties with a personal authority that exists apart from (and

independent of) the overall truth of the rule which supports the claim, does provide the needed bilateral structure.

Finally, the article argued that the connection between equal proportionality and rule defeasibility could be forged in the other direction as well. That is, the content appropriate to defeasible rules as a structure was equal proportionality. While a process of defeasible rule development could, as various possible endings, tolerate the real and *unequal* possibilities of either a claim without any reply, or a complete reply to some claim, in those cases where the values advanced by the claimants ended with incomplete replies (or replies that, while relevant, were incommensurable), then the only solution appropriate as an ending to such a process would be one that sought to maximize the equal proportional satisfaction of these remaining values. A non-proportional or commensurable balancing of values at such a point would make a complete nonsense of having such a process at all, and any form of proportional balancing other than equal proportional balancing would do violence to its equality.

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